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The Railway Companies and the Passenger Duty.

WITHOUT doubt the representatives of the railway interest of the United Kingdom, or at least of that of Great Britain, have definitively committed themselves to the policy of attempting to obtain the remission of the passenger-duty on railways. So large is the amount of capital affected by the question, and so serious is the effect, on the public at large, of any great movement affecting the working of the railway system, that it is well worth while to inquire into the grounds, and to anticipate the results, of the claim now urged by the companies. It will be our endeavour to do this, not in the spirit of partisanship on either side; but as bringing before our readers the data, as well as the arguments, on which it is for them to form their individual judgment.

The first point to be regarded is the magnitude of the question. It has definite and easily-ascertainable limits. The figures published by the Board of Trade state the total capital, in shares, stock, and loans, invested in railways at the end of 1874, at 609,895,931*l.*, or in round numbers 610 millions sterling. The distribution of this sum between England, Scotland, and Ireland is not given in the return. But the respective mileages of line open in the three countries are as follows:—In England, 11,622 miles; in Scotland, 2,700 miles; in Ireland, 3,127 miles. The importance of the distinction, in this case, arises from the fact that no passenger-duty is paid by the Irish lines. As far, therefore, as we can gather from the returns, the average pressure of the duty is understated in the analysis of expenses furnished by Capt. Tyler, as regards the English and Scottish lines, by bringing the untaxed Irish traffic into the general total. The correction thus due, however, is only 15 per cent. on the ratio of the charge in question to the total income of the Scottish and English companies.

With this slight correction, the Government returns enable us to arrive at the incidence of the passenger-duty thus:—The total expenditure per mile, on the average of the railways in the United Kingdom, during the year 1874, was 1,924*l.* Of this sum, the Government duty amounted to 36*l.* In 1873 it amounted only to 31*l.*, to which figure it had gradually fallen since 1870, when it stood, as in 1874, at 36*l.* This amount is equivalent to a charge of 1·04 per cent. on the average income of the railways of the United Kingdom, or to about 1·19 per cent. on that of the railways of Great Britain. It may here be remarked that the rates and taxes borne by the railways amounted, in 1874, to exactly double the amount of the passenger duty. Thus, the entire incidence of taxation and rating, during the year quoted, was 3·12 per cent. of the average incomes of the railways of the United Kingdom; which is equal to an income-tax of 7¼d. in the pound; so that 2½d. in the pound is the proportion of the passenger-duty to the gross revenue of our railways.

The railway advocates describe this charge as an exceptional and onerous tax, which not only unduly presses upon them, but which is also injurious to the interests of the public. This is a grave and uncompromising statement, which was contained, in so many words, in a memorial addressed by the shareholders of one of our great companies to the First Lord of the Treasury and the Chancellor of the Exchequer. It is clear that if such a statement be verified there is a case for careful consideration.

We have been so frequently accustomed to see the interests of the railway companies, and those of the public, not only regarded, but treated, as antagonistic, that we hail any expression, on the part of the managers of the former, that shows a disposition to regard them as identical; or, at all events, as harmonious. It is extremely desirable that it should be borne in mind how large an amount of national interest is invested in the form of railway property. Viewed as nominal capital, the railway stock is not quite three quarters of the magnitude of the National Debt. But a more accurate mode of investigation is to compare the annual incomes of the fundholder and the railway stockholder, using the latter term to cover shares and all other forms of railway security.

The interest of the Permanent National Debt, together with the payments of terminable annuities, for the year ending March, 1875, amounted to 26,953,681*l.* The net income of the railways of the United Kingdom, for the year ending 31st December, 1874, was 25,251,971*l.* Thus the net income derived from railway stock equalled, within, 1,700,000*l.* that derived from the Funds.

But this comparison, exact as it is, by no means represents the total income derived from the railways of this country. The twenty-five millions and a quarter of net revenue only form 43·4 per cent. of the gross revenue of our railways. The large sum of 31,647,517*l.* was spent in the year referred to on the working of our railways; that is to say, it was spent, more or less directly, in wages; as even the cost of materials, in the first instance, resolves itself into either rent, royalty, or cost of labour.

Thus as a source of income supporting, either as wages or as interest of money, a given amount of population, the railways of the United Kingdom assume an importance fully double that of the National Debt. It is evident, therefore, that to regard the railway shareholder as a person to be considered as an adverse creditor of the public, or as the holder of an interest hostile to that of the public, is as unwarrantable as to regard the fundholder in the same light. Indeed, as far as the labour-supported part of the population is concerned, their interest is far more closely bound up with that of the companies than with that of the public creditor.

The arguments urged by the advocates of the holders of this great property for the remission of the tax of 2½d. in the pound on their gross income are as follow:—

It is stated, no doubt correctly, that the duty on railway passengers was originally imposed by Parliament upon the model, and according to the precedent, of the stage-coach duty. It was first fixed at the eighth of a penny per mile per passenger, and afterwards altered to five per cent. upon the gross receipts from passengers. From this duty, however, it must be remembered that the third-class traffic is, to a great extent, free. The great development of this class of traffic, in proportion to that of the first and second classes, is, therefore, an important feature in the case, as alleviating, to a considerable extent, the incidence of the burden of duty on the companies. In 1858 the passenger receipts of the railways of the United Kingdom were,—from first class, 3,002,838*l.*; second class, 3,527,377*l.*; third class, 3,616,192*l.* In 1874, the receipts were,—first class, 4,499,351*l.*; second class, 4,099,181*l.*; third class, 12,346,605*l.* Thus, while the first-class passenger income has increased 50 per cent. in eighteen years, the third class revenue has more than tripled, and rather less than quadrupled.

It is not, however, on the entire third-class revenue that the duty is remitted. From recent judicial decisions, first in the Court of Exchequer, and then, on appeal, in the House of Lords, it is declared to be the law that the remission can be claimed only on third-class trains which stop at every station. Here the companies certainly have a pretty clear case in their favour. It would seem to be within their power, by making all trains conveying third-class passengers at not more than 1d. per mile fare stop at every station, to escape payment of passenger-duty on 60 per cent. of their total income. It is clear that the whole body of passengers would be seriously inconvenienced by such a step. Nor is it obvious that any advantage would accrue to that class in behalf of whom the provision was introduced by the Legislature. Unnecessary stoppages are as irksome to one class of passengers as to another. The question of the stations at which traffic of any particular description may best be collected, at any particular hour, is one eminently suitable to be decided by the traffic manager. It is one as to which Parlia-

ment can know nothing, and the Board of Trade can only be guided by the experience of the working of the lines. It is very hard, therefore, to show upon what grounds, except the fiscal ground of disinclination to surrender any tax, the present difference in taxation of the third-class traffic can be sustained. The companies may, as the case actually stands, be very strongly driven to inconvenience the entire travelling public, for the sake of saving 5 per cent. on a portion of the third-class traffic. Apart from the wider question, what share of the public burden is it fit that the railway shareholder, as such, should support, one or other of two solutions of this difficulty may be found. Either the whole 1d. a mile traffic should be free, or the whole should be taxed. The distinction confirmed by the House of Lords, no doubt, is law. With equally small doubt it may be pronounced unpractical and unwise. It involves much contingent disadvantage; while there is no single sound argument that can be urged in its favour.

The total amount paid for passenger-duty is not stated in the Board of Trade return; but from the figures given by Capt. Tyler it may be calculated at 592,000*l.* for the year 1874. The total receipts from the passenger traffic, for Great Britain, in that year, were 20,805,735*l.* Of this 11,762,354*l.* was for third class traffic. Five per cent. on the former sum is 1,040,286*l.*; five per cent. on the latter is 588,117*l.* The difference is 452,069*l.*, or 140,000*l.* less than the actual tax. But there is an amount of a little over a million received from periodical tickets, the distribution of which is not given; although very little of it can be derived from third-class passengers. It results that something like 100,000*l.* per annum is the outside that the companies could expect to save by the alteration of the existing law as far as it relates to the third-class traffic.

As far, therefore, as the contention between the companies and the tax-collectors has taken a legal form, the total amount in dispute amounts to something less than a halfpenny in the pound of the gross revenue of the railway companies. The saving to be effected is not very considerable. But the interference with the powers of the companies to arrange the stoppages of their trains in the mode best suited to the traffic, though enforced by only so slight a penalty, is in principle objectionable. The financial question might be left in the *status quo*, and the hands of the companies left untied, by a very simple expedient. If the passenger-tax were reduced to 1 per cent. on all traffic not paying more than 1d. per mile per passenger, the companies would be free from interference, and the revenue would remain what it actually is.

We have spoken of the strongest point in the memorial of the railway shareholders; their claim for the remission of the duty, as far as regards the penny-a-mile traffic, which is the only part of the question that can fairly be described as in any way "injurious to the interests of the public." Even if it be a grievance, it is but a trifle; and, such as it is, might very easily be adjusted. There remains the general question of the claim for the total abolition of the duty, which opens a wider field of inquiry.

The arguments of the companies, as put forward by the Great Western directors, are these:

As the railway-passenger duty was framed on the model of the stage-coach duty, and as the latter has been abolished, the former ought to be abolished also.

Secondly, the duty is a tax upon trade, and therefore objectionable on the principles of a sound economy.

Thirdly, it is excessive in amount, being equal to 10 per cent. on net passenger receipts.

Fourthly, it is unequal in its incidence. Railways carrying little except passenger traffic pay a larger proportion of their gross revenue than do those which carry a large mineral traffic. Some railways have the power to raise their fares to cover the duty; others have not.

Fifthly, the companies have done more than they are legally bound to do to facilitate traffic, and thus have a claim on the consideration of the State.

Against these reasons it may be urged, on the other hand, that all taxation is onerous to those on whom it falls; and that special objections exist to every tax. But taxes are necessary for the State. The only question, therefore, that remains is: which are the more and which are the less objectionable?

The railway companies have been invested by the legislature of the United Kingdom with powers and privileges such as are altogether exceptional. Instead of being the usufructuary holders of the lines for a certain number of years, as is the case on the Continent, they have been made permanent proprietors of communications that are usually held as the property of the State. In the exercise of their powers they have extinguished important interests which, before the introduction of the locomotive, maintained the internal communications of the country. By fair competition they have run the coaches off the road, and reduced the turnpike trusts to bankruptcy. By measures which have not always been those of fair competition, they have in a great measure closed the canals. No compensation has been paid by the railway companies to the interests they have injured. Public policy demands the maintenance, as far as practicable, of highway communication. The removal of the stage-coach duty has been a step taken in pursuance of this public policy; and the transference of the burden of maintaining the roads from turnpike trusts to the ratepayers has also been necessitated by the change in the course of traffic. It is difficult to see how this acceptance by the taxpayer and ratepayer of a load thrown upon their shoulders by the railway companies can entitle the latter to the remission of the only tax which they bear, and under the condition of which they applied for their powers of incorporation.

The statement that the tax, as being on trade, is contrary to economical principles, applies with equal force to most of the sources from which the public revenue is derived. Customs duties and excise are as much taxes on trade as passenger duties. So is a large portion of income-tax. If it be admitted that such taxes are objectionable, we should sweep away more than half the public income of the State at one blow.

With regard to the amount actually paid, whether excessive or not, a comparison with the regulations of other countries shows that the English railways are exceptionally favoured as to their contributions in support of the State. For rates, taxes, and passenger duties, altogether, the English companies pay the average amount of 108*l.* per mile per annum. The French companies pay about 600*l.* per mile per annum. In the latter case, indeed, the Government have contributed to the construction and establishment of the railways, in a manner that has not been the case in this country. But if five per cent., with an addition by way of a sinking fund that will repay the Government advances by the time of the expiration of the concessions, be allowed *per contra*, the benefit which the State annually derives from the railways in France is still five times as much as that obtained by the English Government. Add to this that the traffic is less per mile in France; that the companies have been compelled to make a second, and a third system of branches, which are worked at a very small profit, and in some instances at actual loss; and that in two-thirds of a century the French lines will all be the property of the State. It cannot be doubted that the relations between the English Government and the railways are very far more favourable to the latter than is the case in France. The difference in imposts per mile alone, if taken at twenty-five years' purchase, is equal to a subvention of 12,500*l.* per mile in favour of the English lines.

The last argument, which is to the effect that the passenger-tax presses unduly upon those lines which have only, or mainly, a passenger traffic, is one that tells both ways. It is no doubt the case that when the passenger-tax was imposed, no one had any clear insight into the magnitude of the traffic of the future. No one had any idea of the different rates of profit at which the different kinds of traffic would be carried on. It so turned out, however, that it was just the most lucrative traffic on which the tax was imposed. In England, this tax weighs, as we have shown to be the case, mainly upon the first and second class traffic. In France, the tax of the "*double decime*" is imposed, not only on all passenger traffic, but on the goods traffic *a grande vitesse*—the fast goods traffic.

The average receipts per train mile on the railways of the United Kingdom, in 1874, were 68·11d. The average cost was 37·89d. But while the receipts per passenger train mile were 60·72d., those from the goods trains were 75·84d. The receipts *per head* from the passengers are about the same as the receipts *per ton* from the goods; that is to say, that to carry a single passenger earns as much as to carry a ton of goods. The number of miles travelled by goods and by passenger trains are nearly equal; the former being 96,749,953 miles, and the latter 100,025,939 miles. It results (as indeed any one may see by watching the line of a great railway) that the goods trains are far longer, heavier, and more costly to run, than the passenger trains. But if the goods trains only average three times the weight of the passenger trains, they must cost three times as much per mile, subject to a small correction for difference of speed. On that view the profit made per mile by a passenger-train would be rather more than double that made by a goods train; the figures being respectively 41·78d. for the former, and 18·94d. for the latter. This, of course, is only an approximation. But there is reason to believe that it is not very wide of the mark. At the allowance above made the passenger-traffic would be worked at a cost of 31 per cent. of the gross income, and the goods traffic at a cost of 75 per cent. Now the Metropolitan Railway is almost exclusively a passenger line, having carried, during the last half-year of 1875, only 5 per cent. of goods. The working cost of the Metropolitan is rendered higher than the average by the special circumstances of the line. In point of fact, a train mile on the Metropolitan, in the last half-year, cost 41·75d., which is much above the average cost. But the working expenses were only 34 per cent. of the gross receipts. It is pretty clear, therefore, that the gain from the passenger traffic is so much more in proportion than that from the goods traffic, that the incidence of taxation on the former alone is highly favourable to the railway companies. Nor should any individual line which limits its traffic to the most lucrative branch complain on that account.

Such, in brief, are the main arguments for and against the abolition of the passenger-duty on railways. We content ourselves with endeavouring to place each in its fair light, without attempting to strike the balance between them. That we leave our readers to do. But the main point on which it is well to dwell is the comparative unimportance of a question that has been put forward as though it were one of vital magnitude. On the broadest view, however, that of the total remission of duty, the gain to the companies by this measure would only amount to 1 per cent. on their income; while on the alternative claim, that of the abolition of all tax on the third-class traffic, the companies are not asking for a higher amount of relief than a saving of less than a halfpenny in the pound on their receipts. Such a saving is of microscopic amount in comparison to that which may be effected by means entirely within the control of the companies. So long as the entire coal traffic borne by the railway trains is carried at a price that is limited by a competition with the freight of coasting from the Tyne and the Tees to the Thames, which is about 3s. 10d. to 4s. per ton for 250 or 300 miles, the railway companies are incurring a loss, if not in actual expenditure, yet certainly in wear and tear, in comparison to which the whole amount of the passenger-duty is but a trifle.*

The Walker Art Gallery, Liverpool.—The Liverpool Town Council were lately asked to confirm two recommendations which appeared on the programme of business in connexion with the approaching completion of the Walker Art Gallery. One recommendation referred to the approval of a plan which had been considered by the Finance Committee for the Improvement of Old Islington Market, at an estimated cost of 3,100*l.*, subject to modification in matters of detail, the amount to be paid out of the surplus income; and the committee also recommended that the offer of Lieut.-Col. Steble to present a fountain of the value of 1,000*l.* to be placed opposite the entrance of the Walker Art Gallery, be accepted. The site of the Old Islington Market is the triangular area within which the Wellington column is erected. When some progress had been made with the Walker Art Gallery, it was felt that the adjacent associations were altogether out of character with the marked improvement which would be visible when the Art Gallery and the Circular Reading-room adjoining it came to be completed. Mr. Shelmerdine, the borough surveyor, proposes to flag the whole area and enclose it with pedestals and chains similar in design to those which form the enclosure of the west front of St. George's Hall.

* This article was in type before the recent interview of a deputation with the Chancellor of the Exchequer.

PROFESSOR E. M. BARRY ON ARCHITECTURE.*

INTRODUCTION.

BEFORE commencing a new series of lectures, I wish to preface them with a few introductory remarks as to their purpose and scope. I will observe in the first place that they are intended for students, students of art, as taught in this Academy,—not for those only who propose to devote themselves to Architecture as a profession. My earnest wish is to interest you all, if I can, in the subject,—to make you feel that there is something in architecture worthy of the attention of reasonable men,—that it is an art, the oldest of all, able not only to hold its own with its sisters of Painting and Sculpture, by giving delight to the æsthetic faculties, but also to take its place in the ever-onward movement of culture and civilisation.

Having regard to this object, I do not propose to treat at length of the complicated details of the technical practice of architecture. This, it seems to me, can be better taught in classes of architects only, and it is, in fact, so taught within these walls by our excellent Curator in the architectural school. I shall be satisfied if I can bring before you certain salient points, and thus lead you to take an intelligent interest in architectural matters.

I propose to attempt to trace the rise of the various phases of domestic architecture as they have prevailed in this country. My illustrious predecessor, Sir Gilbert Scott, in dwelling on ecclesiastical types, has made that aspect of the question so fully his own, that I will not seek to touch, with weaker hands, that which he has so exhaustively dealt with. I shall, therefore, confine my remarks, this session, to domestic architecture alone.

It seems to me, indeed, that the latter is emphatically the problem of the day. Custom and tradition determine the spirit, and even, to a great extent, prescribe the forms of our church architecture, but the laws which are to govern the future of house-building are ever in debate. The habits and wants of whole classes must be studied, under the guidance both of science and even of political economy, before we can hope to succeed in bringing "sweetness and light" to the toiling millions by providing them with healthy and artistic homes.

If I were tempted to despair of the progress of architecture, it would be from seeing it regarded with apathy. I am not anxious to impose my own views upon you. I want you to think for yourselves, and to bring to the solution of architectural questions that common sense with which the average Englishman is happily so largely endowed.

In seeking progress, we must have no fear of criticism. Even if it seem to us often one-sided and unfair, it is better than indifference. This is true, in a special sense, with regard to criticism of professional doings proceeding from laymen. We may perhaps be surprised to read books on building enforcing, in the midst of good advice, well-known things as if they were novelties; but we cannot fail at the same time to notice with satisfaction the hold which such things show architecture to possess on the affections of our highly-educated laymen. Anything is better than the resigned ignorance which proclaims, as if it were a merit, that it knows nothing of architecture.

Do you suppose, if our rulers in Parliament had cared for architecture and for social matters as they do for politics, that our public buildings would be what they are; that our streets would have been handed over to railway companies for disfigurement; and that it would have been left to the present generation to deal with the great difficulty of providing dwellings for the poor in our crowded courts and alleys, foul with the neglect of ages? How is it that not one of the great architectural works now under construction by the State in London has escaped mutilation of features, considered important by their architects, while the very spirit of delay has seemed to preside over their conception and execution? The answer must, I think, be apathy,—an apathy which refuses to be stirred amidst the absorbing anxieties of power and place. This being so, I say again that I welcome any signs of lay appreciation of our noble art.

And now I wish to say a few words to those of you who are studying architecture as a profession, to be followed by you hereafter as a means of livelihood. You do well if you are conscious within yourselves that you love the art for its own sake. If not, you will be sorely tried by the cares and responsibilities with which you will find the practice of architecture to be surrounded. It is difficult, for example, to overstate the depression which comes upon the architect, when he has to descend from his day-dreams of solemn cathedrals and airy palaces, to the prosaic realities of estimates and "quantities," builders' contracts, and "extras and omissions." I wish, for many reasons, that he could avoid these things, and perhaps some day it may be possible to do so; but at present this cannot be, and the architect must often devote his energies to that which appears to be unworthy labour.

The mention of this part of the duties of an architect at the present time leads me to add a word or two on a not very welcome topic, which has lately occupied the attention of newspaper readers. It can scarcely be needed for me to say to you that before all things it is necessary for an architect to be a man of honour, a trustworthy agent, a gentleman in the best sense of the word. I am happy to believe that such is the rule; but it has been lately said, chiefly by anonymous writers, that exceptions exist, and that some architects have allowed themselves to touch the wages of dishonour. I could wish, as I have just said, that the architect could follow his art alone, and have nothing to do with money matters. In any case, however, his integrity should be beyond question, and the public bodies which represent the profession rightly make this all-important matter the keystone of their regulations.

We are told that this is not enough, and a distinguished member of the legal profession has insisted that legal enactments are needed. Be it so. I would welcome any well-considered scheme which would give legal effect to the moral reprobation of abuse. I recognise fully the responsibility which attaches to any one who is engaged to render professional service. I gladly welcome any practical suggestions to fix this responsibility, and I would do so all the more willingly when they are found to emanate from that great irresponsible profession, the Bar of England,—that profession which alone asserts the complete freedom from liability of its members, even in cases where important duties have been liberally paid for, but have not been performed.

I say this because it is not too much to hope for, that the "eye for defects" so appropriate in the case of a law reformer will have its keenness of vision so strengthened by observing the deficiencies of other professions that it will not suffer itself to be closed as long as any blemishes can be seen nearer home. By enforcing on *agents of all kinds* the full extent of their responsibilities we may thus obtain reforms which, without impairing the lustre of a noble profession, may increase its claims on the respect and confidence of the public.

This is not the opportunity for dealing further with this subject; but I have felt that in addressing those who have the future of the architectural profession in their hands, I could not do wrong to suggest to them a ready acceptance of anything that may serve to show that their honour is unimpeached and unimpeachable. Believing as I do that the fair fame of architects will stand comparison with that of any other class or profession, I shall gladly see enacted any general law that may be thought desirable to recognise the principle of responsibility of all professional men in a full and comprehensive manner.

Having now indicated the spirit in which I propose to address you, I will proceed with the first lecture of the season, from which I hope I have not detained you too long by these introductory explanations.

I think I cannot begin my fourth course of lectures better than with a few reflections on originality.

In considering our subject last year, I took occasion to inquire into the influence of Nature on architecture, and we found, as you may remember, that it was of an indirect character, leading us to attempt to grasp general principles rather than to court inevitable defeat by efforts of direct imitation. It is well, I think, to bear this conclusion in mind when we come to inquire into the question of originality in architecture. We all appreciate the spontaneous and unconventional charms of Nature, but for art there are rules which we must frankly recognise. Originality in architecture, therefore, must be subject to certain restraining circumstances, which it is our duty to study with care and attention.

Many a young man of talent begins with the idea that it is easy to be original; the wisdom gained from the experience of ages seems to him foolishness. A new life opens before him. All things are to be new; the beaten track is to be deserted, or left to the timid and worn-out. His art is to take a new departure, and whatever he does, at least it shall not be common-place. I suppose most of us, at some time or other, have experienced feelings akin to these. It is well that it should be so; they are a part of those generous impulses of youth without which the world would, indeed, be badly off,—a prey to the sordid calculations of selfishness, ever sinking deeper and deeper into the hopelessness of a fatalist philosophy. We may, therefore, well rejoice that a spirit of independence exists among us; for in it is life, and where there is life there is hope. The architect, if he have not originality, must, at any rate, be possessed with the spirit of a true reformer. He will do little in his art unless he has enthusiasm, and an enthusiasm that needs to be checked is better than a sluggishness always requiring to be spurred and stimulated, working at best spasmodically, and often to little purpose, for lack of zeal.

Now, in architecture, I need scarcely point out to you, originality is subject to very considerable limitation. In its quality of usefulness, in its dependence on material considerations, and also in its financial aspect, you will at once perceive the elements of restraint. These will soon make themselves felt by the young architect, and it is well for him if they do not crush his high aspirations, and so dishearten him. He has to learn that his art must be exercised in accordance with common sense, and that originality is not to be attained by conscious effort.

It has been well said by Sir Joshua Reynolds, that "as our art is not a divine gift, so neither is it a mechanical trade. Its foundations are laid in solid science; and practice, though essential to perfection, can never attain that at which it aims, unless it works under the direction of principle." This is true of architecture, even more than of other forms of art. The architect must be versed in science before he can design a building that shall stand; he must enter into the spirit of the rules of his art before he can apply them intelligently; and while ever remembering the artistic side of his calling, he must not neglect the more prosaic considerations of utility and sound construction.

If this be conceded, you will follow me the more readily in the inquiry into originality which I propose to prosecute in this lecture.

Now originality in architecture is not likely ever to be manifested in an absolute sense. The various forms of detailed construction, such as arches and columns, which are scattered over the surface of the globe, may have exhausted the combinations of possible forms, and I do not think we need concern ourselves to-night with the question of the invention of a new style of architecture. It is indeed not necessarily creditable to an architect to have done that which has never been done before, for he may have neglected considerations which have very properly prevented others from falling into mistakes,—in which, it may be, he is foolish enough to glory.

If we realise properly the true nature of our art, we shall not be always seeking for novelty as the chief desideratum. Architecture is the outcome of accumulated experience, and we cannot, therefore, imagine that we are wise enough to dispense with the assistance which such experience offers to us. To do so would be to destroy the scaffolding before we have raised the building.

An originality, again, which is sought for only in strange and startling combinations, is, more often than not, no originality at all, but merely a tasteless jumble of discordant details which may have struck the fancy of the young architect at different times and places. An opportunity offers, as he thinks, for their employment,

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* First lecture: delivered at the Royal Academy on Monday, February 26th.

and the sketch-book is emptied, and the *disjecta membra* scattered, with a result which is neither beautiful in itself nor consistent with any sound principles of composition.

I have said that our architecture must be reasonable, for we have to bear in mind that men do not erect buildings to please architects, but to serve their own needs and purposes. If this necessity be (as doubtless to some extent it is) a difficulty in the way of originality, it will, nevertheless, if fairly recognised, save us from some other snares which lie in our way in the direction of imitation. Our architecture must as we know be affected by a variety of causes external to ourselves, such as climate; and there are other influences which I may call internal, which are not less powerful. We know that the Parthenon would not bear transplanting, and the direct imitation of existing buildings in other styles is confessedly intolerable. If the sunny porticos of the south are out of place in our more rigorous climate, it is no less true that where the sun is a friend only too rarely seen, we do not act wisely in excluding his rays by heavy mullions and clumsy bars for no better reason than that these details have been used at a former period.

The temptation to rely too absolutely on the past is ever great, and to some minds almost irresistible. "We have seen and admired the masterpieces which have excited the admiration of ages. Let us imitate them,—like causes produce like effects. They are great successes,—we shall succeed also." Such reasoning as this has the fatal effect of unreality. It ignores the differences of time and circumstances, and, if literally followed, would degrade our art into the mechanical trade which we feel it cannot be. No; good architecture must be something more than a blind imitation of the works of others, and this it is which makes the question of originality of so much importance.

I have spoken of differences of time. These cannot but affect our architecture, for they enter into all our public and private habits. It is true that the essential requirements of mankind must (with certain limitations) be always and everywhere the same, but, as ages roll on, various phases of those requirements come with exceptional prominence, and demand the attention of the architect no less than that of the statesman and philosopher.

Thus the architectural splendours of Mediæval art mark a period in which ecclesiastical influences were dominant. Churchmen represented the intellect and refinement of the age, and they have earned the gratitude of posterity by the splendid works with which they have endowed us. How great was their power and skill we may see throughout our land, in our stately cathedrals, abbeys, and churches. No one must underrate the importance which religious influences have brought to bear on art, and the support given by them to the whole framework of manners and morals in the Middle Ages.

But a time came when society, thinking itself able to move alone, began to disdain leading-strings, and to regard as mischievous the guides and safeguards till then seemingly indispensable. It was to these awakening perceptions that we owe that great revolution of thought which we call the Reformation. We cannot here speak of its religious aspect, but we may briefly consider some of its influences on architecture.

In the first place, it brought about a disposition to break with precedent, to adopt change, and to welcome novelty.

In the preceding times men were content to follow in the footsteps of their immediate predecessors; they were accustomed to take their architecture, as they did their religion, on trust; gradual alterations of detail might be allowed in either, but in no case could any radical changes be permitted. You can see the effects of this spirit in almost any of our great historical churches, in which you may trace with precision the modifications of mouldings, tracery, and sculpture, that mark the successive phases of Mediæval art so clearly as to enable us to fix without difficulty the dates of the erection of each portion of such buildings.

The clergy, being the great church-builders of the time, were the keepers and preservers of architectural traditions. A certain uniformity of plan and proportion was maintained, subject, of course, to limitations due to local or peculiar circumstances in certain cases. The workmen knew only the forms of art which they saw around them, and were therefore ready to submit to the authority which claimed their obedience. Originality was not sought for its own sake, and the whole progress of architecture resembled the gradual growth of natural objects.

The change which came with the Reformation broke with all this. It was not only a change in the forms or even in the essentials of religion. It was a great uprising of the human intellect, demanding reasons where formerly it was contented with commands. Knowledge was sought in all directions, and printing, newly discovered, came to its aid. Not only the Bible, but literature generally, became spread throughout the world, the priceless possession of the many, no longer the exclusive privilege of the few. Nations began to interest themselves in each other, and an approach was made towards free communication between countries. Everywhere there was excitement,—a longing for light, a determination to assert freedom.

Can we wonder if a revolution such as this has left its mark on architecture? It led naturally first to an indifference towards the old forms of Mediæval art, and then to a hatred and contempt for all that seemed to speak of a yoke that had been once broken never again to be imposed. Such feelings soon manifested their destructive tendencies, and the spirit of iconoclasm was let loose. Destruction and demolition followed in its wake. Fortunately for us, in this country, the native moderation and prudence of the English people prevented the occurrence of extravagances on the scale witnessed elsewhere, and their conservative instincts were readily enlisted on the side of preservation after the first whirlwinds of enthusiasm had somewhat spent their force. We owe to this spirit the exceeding richness of our country in Mediæval remains, which constitute a very mine of art.

But, apart from any local limitations, such as were due to the character of particular nations, the movement as a whole went on, and everything was ripe for change in architecture. The direction it was to take was soon indicated by the interest shown in the revival of classical literature. It is not easy to account at first sight satisfactorily for the previous neglect of this subject. The great works of the classic authors had not been lost, and Latin was the language of the Church, understood more or less by all ecclesiastics with any pretensions to education. It is certain, however, that classical literature had become almost forgotten, and that the revival of it in the fifteenth century came upon the world as a startling novelty,—a new discovery,—to be hailed with the enthusiasm which, as we have seen, was ready to welcome all things new.

The spirit of the times was thus strengthened and stimulated by the literary revival, and both causes tended to break with the rules and precedents which had heretofore guided our architecture.

With these changes came a development of social wants, and Domestic architecture began to assert its claims. Church building was no longer the chief business of the architect, and, indeed, almost ceased for a time to be his business at all. The ecclesiastical edifices which had been left to us seemed to be sufficient for all time, and if they were not suffered to fall into actual decay, no attempt was made to enlarge them, or to increase their number. We know that this feeling extended to a late period, and that the present generation has had its energies tasked to the utmost, in its attempt to cope with the difficulties bequeathed to us by an age of ecclesiastical neglect.

Setting aside, however, for the moment, any consideration of excesses, such as perhaps must always mark every great public movement, we may notice that the age of church building on a large scale appeared to pass away with the Reformation, and that ecclesiastical architecture and influences lost at the same time their predominance.

The enlargement of views consequent on the spread of education, the tendencies induced by the revival of classical literature, the nascent importance of science, the gradual uprising of the middle and lower classes,—all tended in one direction, and some of the results to our art soon showed themselves in the increased attention that was paid to Domestic buildings.

In estimating the importance of this movement, you will readily see how completely it altered the duties of the architect. In ecclesiastical work he had positive orders, and well understood precedents, to guide him. Domestic architecture, however, introduced new considerations, and would not suffer the neglect of that condition of usefulness, which constitutes one of those limitations of originality to which the architect must submit.

It is from this time that the influence of the laity began to make itself felt. The old ecclesiastical force had spent itself, at least for a time, and individual tastes came into prominence. A battle indeed there was, and in the edifices of the Renaissance we find columns and entablatures, borrowed from Rome or Greece, in close juxtaposition with mullions, gables, and Gothic tracery.

Most of you, probably, are familiar with examples of this mode of work, at Haddon Hall, Hatfield, Crewe Hall, Knole, &c. It constitutes the Transitional style of English work, indicating at once a taste for the new and a love for the old. It marks a period when men began to feel that they had achieved their liberty; that no one had a right to make them afraid; and that they might in consequence direct their energies to the improvement of their estates, the splendour and convenience of their houses, and the welfare of their dependents. No longer compelled to be armed *cap-à-pie* against war or tumult, the ponderous coats of mail became peaceful ornaments of the hall or castle. Swords were left in their scabbards, or were hung up on walls for decoration, and if not literally turned into pruning-hooks, became the protectors instead of the foes of all peaceful industry. While the squire devoted his leisure to the sports of the field, the mistress of the house occupied herself with domestic management, and, with her handmaids, executed marvels of patient work in embroidery, tapestry, and the like.

Such was the result of the calm which had followed the fierce storms that had swept over public affairs. The instinct of our people turned then, as now, to country life, and we have evidence in many a stately home how well it was loved and cared for by its founders. Locomotion was not as yet easily practicable. Pack roads, traversed by horses, were often the sole means of communication, and even my lady would have to ride pillion if she desired to visit her market-town. To stay at home was therefore the rule, and *home* was consequently beautified, not only by handsome architecture, but by all the means at the disposal of its owner. We owe to such circumstances the quaint formal gardens, the well-kept bowling-greens, the avenues and mazes, such as exist, for example, at Hatfield.

Hospitality was not forgotten, and we find great quadrangles surrounded by quarters for retainers; also stables, not only extensive, but often ornamented in an elaborate manner. In fact, a great man's house in the time I am speaking of was an example, in a small way, of a kingdom, and possessed an individual importance of which it is difficult to form an adequate idea in the present day.

I have not, however, called your attention to these buildings because of their social importance, although such considerations must always possess interest for the student of history; but I wish to suggest to you their bearing on originality in architecture. They do not, as we have seen, altogether break with the past, but, at the same time, they show no slavish regard for precedent. New principles are admitted, but the new work is based on development rather than destruction. The chapel, for example, is recognised, and forms an integral part of the structure. If it be no longer devoted to the old ritual, it clings to the old shapes and usage, and stands forth as a witness that the ruling spirit in our land has ever been one of reform and not of revolution. If we can trace evidences of this spirit in the results of the fierce conflicts which have excited the minds and passions of men, it would be strange if we found no signs of its influence on our architecture, which had not yet ceased to be a truthful exponent of the manners and customs of its age.

But such conservative instincts did not altogether suppress originality. Our old English mansions have a character all their own, and reflect with fidelity the changes which I have endeavoured to indicate. They are evidently dwelling-houses of various degrees of magnificence, according to the wealth, rank, or position of their owners. They cannot be mistaken for anything else,—they are not like churches or castles, although they may possess features borrowed from both. They are evidently truthful, and therefore pleasing, even when, as often happens, their actual details are not in the best taste. They are thus a good example of that originality of architecture which may be sought

in the application to new circumstances of knowledge gained from experience. Rightly studied and understood, they contain valuable lessons for ourselves. While giving evidence of originality and beauty, they do not kick against the pricks of that law of usefulness which must be obeyed by the architect. But, arising naturally from the requirements of their owners, they frankly recognised that the first necessity of a building is that it shall be suitable for the purpose for which it has been erected.

In later times, this important truth has been too much obscured, and reproach has been cast on architecture accordingly. The architect, while ever striving to elevate his art, so as to refine and purify the taste of his time, must always remember that his work is for use as well as for show, and that it must not be undertaken to glorify himself, but to serve his fellows. With the experience of the world before him, he must not be satisfied with the evanescent reputation which waits upon those who, by dragging to light disused forms of architecture, raise a spurious claim to originality. He must be content to apply his art to existing needs, rationally, carefully, and lovingly; and in so doing, may find the means of endowing his work with an interest which will confer on it a real claim to be truly original.

Let us now consider the bearing of another of the limitations of originality, to which I have referred. I allude to the question of materials. Here the architect comes in contact with difficulties of a very uncompromising sort. He is often tempted to envy his brethren of the brush. Not only is all nature open to the painter, as his guide and instructor, but he is also unfettered by material considerations. The architect, on the other hand, deriving but limited and indirect assistance from nature, can do nothing of himself, but must trust to others, not only to enable him to call his creations into being, but also to manipulate the very materials necessary for this purpose. He must study the characteristics of stone, timber, bricks, iron, and other matters before he can even know how to begin to design, and his projects must vary according to the materials to be employed. This is, as you will readily perceive, a limitation to originality, but it is a limitation which has ever been accepted by all really good architects.

The Greeks are supposed to have evolved these columnar designs of temples from an older timber construction. If so, however, they have, in the spirit of true artists, avoided the error of actual copying, in one material, forms only suitable to another. The proportions of the parts of a Greek temple are beautifully appropriate to the material used, and while in a wooden construction they would doubtless have achieved lightness and elegance; their colonnades of marble express the qualities of strength and repose, which satisfy us at once as the perfection of art under the circumstances of the case.

When the arch became subsequently employed by the Mediæval architects, similar principles were observed. Vaulted roofs were the favourite mode of covering spaces, and the spans of the arches had to be regulated by the nature of the materials available. Arches could only be practically built within certain limits of size, and the thrust of such arches had to be carefully provided for by the erection of buttresses, turrets, and similar features. In this respect the Northern architects showed pre-eminent skill. The beautiful curves of their groinings are not interfered with by ties or other visible support, and the necessary buttresses which exist outside contribute in no small degree to the external beauty of the buildings. Even where these buttresses are exaggerated, they are not without an effective character, as you may see, for example, at Notre Dame, Paris, where the buttresses around the choir have a somewhat undue influence upon the other architectural features of the building.

In the South, the Gothic architects of Italy showed less constructive ingenuity. Ignoring buttresses, they sought other means of combating the thrust of their arches. They found it in a system of iron ties, which connected the columns with each other, and with the walls, and prevented the arches from spreading. This expedient, faulty as I conceive it to be, has attracted admirers, and even some imitators; but, in my judgment, it cannot be approved by the thoughtful critic. It brings evidently under notice the defect which attaches, more or less, to all arched buildings,—their quality of unrest. It gives, therefore, an idea of imperfection, destructive of confidence in the solidity and stability of the structure. We may, perhaps, accept it as inevitable, where it is found; but it is not a feature to be commended or imitated. It is, however, a striking example of that limitation of the architect's power by materials to which I am at present referring.

The same principle of suiting design to materials guided the architects of our Gothic wooden roofs. In these there was naturally greater latitude for freedom of design than with the more intractable material of stone. We, therefore, find in such roofs an infinite wealth of ornament in tracery, framing, and carving, from the palatial roof of Westminster Hall to the covering of a humble village church; but always designed on principles befitting wooden construction.

As with the roofs, so with the fabric. When stone abounded the mason was master; when stone was scarce, the carpenter or the bricklayer displayed his art. We have some fine examples of brickwork in our own country, as at Cotessy Hall, in Norfolk, and elsewhere. In Holland and the Low Countries, and parts of Prussia, brickwork was carried to great perfection, and has recently attracted much notice from ourselves. You will find, by a careful study of its forms, how naturally the latter have sprung from the materials used. The massiveness of stonework is exchanged for a multiplicity of parts, small in themselves, but often exceedingly rich in effect. Tracery, on the other hand, is clumsy, or altogether absent, and we thus miss an important element of design, which is, however, to some extent compensated by the varied and picturesque outlines of chimney-shafts, corbels, and gables, stepped or otherwise.

Progress in brick architecture, in modern times, was long hindered by an excise duty levied on bricks, which practically controlled their manufacture, and hindered improvement. The evil of such things lives after them, and though the duty has been abolished for many years, its depressing influences have remained until very recent times. Now, there are evidences of a greater freedom in the use of bricks of various forms and designs. There is consequently a greater field for the exercise of originality of design; but in availing himself of his liberty, the architect must take care that his liberty does not degenerate into licence, and not therefore try to execute in brickwork details borrowed from stone or marble architecture.

With brickwork is closely allied terra cotta, which may, in fact, be described as high-class brickwork. It is possible that the use of this material may become more common with us than is now the case. If you wish to see the elaboration of which it is capable, you have a splendid specimen in the great Hospital at Milan. The terra cotta of North Italy is generally very good, but this is perhaps the most elaborate specimen of its use. We find in it mouldings, festoons, tracery, and other details which we are accustomed to see worked in stone, all carried out in the most beautiful manner in red terra cotta.

Nevertheless, it may be doubted if such an employment of terra cotta be founded on true principles. From the necessities of its manufacture, terra cotta must consist of many pieces, and in them truth of execution cannot be obtained, in the case of mouldings, arches, columns, and the like. For the more decorative portions, such as the festoons of flowers, enrichments, and the parts generally described as carving, terra cotta has some advantages; but these, it must be remembered, are of a mechanical nature, and will not allow the moulded and burnt clay to compete on equal terms with the life-giving touches of the sculptor's chisel. The general effect of a building, where terra cotta has been freely used for the general features of its architecture, may often please, at a distance, but it will seldom be found to gain on a closer inspection. The spectator then finds that the mouldings are coarse, untrue, and badly jointed, the construction often faulty, while the ornaments, by much repetition, cease to interest and please.

The value of terra cotta as a resource for the architect is, however, so great, that it is well worth his while to study its essential qualities, and regulate his designs accordingly. If it be rarely desirable to adopt it as the framework of the building, it may frequently be effectively and economically employed for subsidiary details; and when combined with brickwork this is both pleasing and appropriate. In the difficulties of its application we find another instance of that limitation of architectural originality by materials of which I am now speaking. The architect must do what he can, not what he will.

Before leaving this part of my subject I wish to add a few words on the use of iron in our buildings. Iron has, as you know, been used more or less in all but the most primitive times; but it has been reserved for the present generation to witness its application on a vast scale. It was formerly employed as an aid to the carpenter and builder; it now frequently supersedes him altogether. It covers huge spans; it bridges mighty rivers. It forms our roads, and furnishes us with floors and roofs. It is, in fact, the slave of our constructors, and will do their bidding in a great variety of ways.

Notwithstanding all this, iron is a great difficulty to the artist. The architect is glad to take advantage of its constructional assistance; but the application to it of artistic design, to make it a thing of beauty, is a problem hard to solve. Our studies of art are based on examples of the pre-iron age, and it is not easy to take a new departure, and to treat what may almost be termed a new material in its bearing on architecture on new principles appropriate to its nature. This, however, must be done, if iron is to enter effectively into architectural design; and we may be sure that as men have now discovered and appreciated the gain which iron has brought to them, they will not easily surrender it. The world will not stand still for architects any more than for others, and if we do not avail ourselves of the materials at hand others will certainly do so, and the great works of the day will develope more and more of an exclusively engineering character.

While architects have been restoring, engineers have been inventing. Greek temples, Italian Palaces, and Gothic churches have risen, on the one hand; while, on the other, we find huge and ugly railway stations, roofs of unprecedented span, and bridges till now impossible. If the former class possess beauty, more or less worthy of their predecessors, whose traditions have inspired them, the latter may claim that they at least owe no filial allegiance, but indicate a development of actual originality.

In the meantime, it may be well to observe, by way of caution, that the use of iron on an extended scale, for constructional purposes, is too recent for us to repose a perfect confidence in its permanency. We know by experience what reliance may be placed on timber, stone, and brick; but the gradual deterioration of iron is still an unsolved problem. Depending, as it does, on artificial protection, we are at once confronted with the difficulty of renewing such protection in concealed positions. I saw but recently two pieces of iron which had been hanging up in an uncovered yard for twenty years. One piece had been protected, and the other left in its natural state. The piece of unprotected iron had become one-third less than the size and weight of the protected specimen; and knowing, as we do, how often iron is employed in inaccessible positions, this experience does not lessen the anxieties we must naturally feel as to its stability and permanence in such cases.*

I might go through the list of materials with which we have to deal, but I think I have now said enough to show you how varied and great are the limitations imposed upon the architect in search after originality. He has not only to consider carefully the peculiar qualities, the genius, so to speak, of the inanimate matter to which he has to communicate the life-giving breath of art; but he has also to be careful that his work shall not be deficient in the less artistic, but not less important, matters of stability and permanency.

It may seem to many that an architect is so much the master of his work that he may fairly be held strictly accountable for all defects, whether of originality or of other things.

The world is now listening for the decision of an absolute monarch, on whose individual will appear to depend questions of peace and war, of momentous importance to millions of people.

* Two pieces of iron cut from the same plate, of equal superficial dimensions and thickness, were, in 1850, hung in an exposed position; one piece having been galvanised, the other being in its ordinary condition. The results of this experiment at the present date are as follow:—

The ungalvanised iron is about 1-8th of an inch less in thickness than the galvanised, and about 15½ oz. less in weight, the respective dimensions and weights of the two plates being at present,—

Galvanised... 9½ in. by 8½ in. by ¼ in. weighing 3 lb. 1½ oz.
Ungalvanised 9½ ,, by 8½ ,, by ⅛ ,, ,, ,, 2 ,, 2 ,,

Unfortunately, the original weight and thickness of the iron were not recorded, but to all appearance the galvanised plate retains its full thickness and weight.

Here, at least, appears to be unlimited power. Greater knowledge leads to a clearer perception of the inaccuracy of such judgments. The despot is, after all, often the mouthpiece of others, the agent of some national sentiment which sweeps onwards with the force of a torrent, and would overwhelm all obstacles. So, to compare great things with small, it is with ourselves. Those who follow the profession of architecture in these days know well how false is the notion of an architect's complete responsibility for designs executed by his orders. He practises an art which cannot find expression except by the will and co-operation of others. He may find the skill, the intelligence, the genius, but all are useless till some one else will provide the means. From the commencement to the end of his work he has to contend against difficulties, and is fortunate if he is able to surmount them without seeing his designs curtailed of their fair proportions. Of course, there are limits to such restraints, beyond which no artist with proper self-respect will consent to be driven; but if some of our irresponsible critics would give an occasional thought to these things, their views on our art, and their opinions of architects, might sometimes undergo a change which would render them more appreciative without making them less just.

We see, therefore, that a modern architect, in carrying out his art, has to take into account at least three considerations from which his painter brethren are free. They may indulge without stint their glorious visions. He is bound down to the practical, and, before he can commence his design, must see that it will serve its purpose of usefulness; that its materials are suitable, both for artistic expression and for wear and tear; and lastly, that its cost shall be kept within carefully-prescribed limits.

On other numerous conditions which branch out from these heads I will not now dwell, though they range from a scientific study of the laws of health to the efficiency of a fastening. Our highly-organised and artificial mode of life in the nineteenth century is attended with complications, from which the architect of old was free, but with which he must now grapple, and on which he must bring his art to bear. He must not chafe against such difficulties, but must conquer them, and in them he may sometimes ultimately recognise his best friends, as having led him onwards in the path of a true originality.

The saying is often quoted that the best definition of genius is "a tremendous capacity for taking trouble," and without subscribing absolutely to this dictum, I cannot impress too strongly on young architects the necessity of attention to details. In a perfect architectural work nothing is a trifle, and no amount of *soi-disant* originality will atone for bad proportions, badly contoured mouldings, and the like. Completeness and attention to little things are necessary to the production of all great works, and I cannot, I think, do better than quote here a piece of advice recently given by the veteran Emperor of Germany to his grandson, on the occasion of the entry of the latter upon a military career. His Majesty, while pointing out the importance of discipline and zeal, declared emphatically that "in the appreciation of what might appear to be a trifling matter was to be found a guarantee for the performance of great things." This counsel is as valuable to the architect as to the soldier, for we, like him, must march with the times.

Not that we can afford to despise the wisdom of our ancestors. It is doubtless well that we should study antiquity in a reverent spirit. Buildings which have received the admiration of thoughtful men for successive ages are not to be dismissed with the shrug and nonchalance of well-satisfied ignorance. In examining such works, commence by the conviction that you have much to learn. They may, perhaps, in some cases, be opposed to your own favourite ideas of art, whether these be Greek or Mediæval, but you may be sure that they will teach much to those who come to them in a proper spirit. Modern work lacks of necessity the "cachet" which the approbation of ages alone can give. Do not believe, therefore, that careful study of admitted masterpieces, followed under proper conditions, will render your own work, when you are called on to compete with them, less effective and original.

I have on former occasions warned you against the snares and pitfalls of a slavish imitation, and you will remember that as a child developes new wants on his way to manhood, even so do successive ages present to us diverse and more complicated requirements, as the world grows older.

The architect, while learning from antiquity, must not bury himself in a dreamy past; he must bear his part in the existing activity of the state of things around him. Accepting forms which have already prevailed as the alphabet and language of his art, it is for him to give them an originality of expression and development which shall be beautiful as well as reasonable. If he have the gift of genius, he will not lack opportunities for its display; if he possess great inventive skill, it will find a vent, even in spite of the limitations which, as we have seen, surround him.

Genius, however, is the Divine gift to a very few. It cannot be learned or communicated. Must the many, therefore, despair? Not so long as there is a firm determination to labour, a fixed resolution to do our best. If great opportunities for the display of architectural genius are not likely frequently to occur, there is still plenty of work in the world for the architect to do; and in carrying it out faithfully, to the best of his power, he will often experience a development of the latter akin to the originality of genius itself. The problems submitted to him may appear small and mean, as compared with those of the builders of olden time, but to be called upon to take his part in the social advancement of his day is no light privilege, and in bringing to bear upon seemingly little things the refining influences of art, he may teach, as well as practise, the sublime lesson, that there is nothing common or unclean.

MR. BENTINCK'S CRUSADE.

THE Right Hon. member for Whitehaven, whose address on the "Decline and Fall of British Architecture," with trifling omissions, we have printed, seems to have some strong convictions, and unquestionably expresses them strongly. The term "Crusade," it is true, can only by analogy be applied to his demonstration, since he is in fact the open enemy of the architectural style which used to be said to have been transplanted here under the influence of the Crusades. He renounces the Goths and all their works. The incident of his address may perhaps be taken as one out of many symptoms of the turn of the tide,—a turn which we have always kept in view, and not unfrequently predicted, even at the time when the Gothic mania was at its height.

But we have always recognised, what Mr. Bentinck does not recognise, the really renewed vigour of architectural interest and enthusiasm which was at the bottom of that movement, and but for which it could never have produced the effect, or run the course which it has run. It is all very well to quote the fanaticisms of over-excitable enthusiastic Pugin; and oddly enough they read now, no doubt, when the tide of feeling upon which they came up has ebbed. But the English Gothic revival was, at all events, just as genuine a movement as the Italian Renaissance, which Mr. Bentinck appears to sympathise with, and sprang from very much the same kind of causes. A period of stagnation was followed in each case by one of those general and apparently spontaneous awakenings of intellectual activity which now and again recur, arising partially out of the feeling that something at any rate must be done to improve matters, and the perception of a contrast between the existing state of things and that of a greater past,—a contrast which seems so striking that all the spirits of the new era rush to the conviction that if we could only bring back again those glorious times, and reproduce their works, we could demand nothing more for our perfect happiness. In this case the Classic Renaissance had run its course and died out, and the stern reality of Mediæval art and architecture could not but fascinate by contrast with the utter weakness and inanity of the Georgian era. It is all nonsense to deny this,—to say that the Mediæval revival was a retrograding. It was not so at the time. It was, at the time, a distinct and unquestionable revival of a renewed desire for at least some art and some architecture, in a generation which had been content with nothing worth calling either. In denying this, Mr. Bentinck and those anti-revivalists of whom he is a type are damaging their own cause by urging views which are palpably overstated and one-sided, to a degree which will repel many who, if the considerations referred to were more moderately and critically presented, might be much more prevailed upon to consider them dispassionately. Take the one matter of churches, for instance, and compare many of the churches which have been built under the influence of the Gothic revival with the sort of edifice in which our predecessors of a generation or two before used to worship, and what reasonable person can deny the improvement? Though the modern Gothic church be a mere imitation,—a mere revival of an old style,—still it is a style, and it is architecture; but what immediately preceded it was neither architecture, nor style, nor anything; it was simply nonentity—negation of art. It is one-sided and illogical to forget this, and to ignore the fact that the Gothic revival has also been the parent of a most extensive parallel movement in relation to ornamental art and workmanship generally. If Mr. Bentinck found himself for one day relegated to the England immediately preceding the revival, and realised (what he seems just now to have forgotten to realise) what kind of dead level in matters artistic was prevalent then, he would be constrained to admit that almost any method of shaking up was better than that dead sea of smugness and indifference which pervaded the society of that period in its relation (or non-relation) to art.

Mr. Bentinck is not only one-sided in his feelings and deductions, but he is wrong in some of his facts, or his way of stating them. It is by no means a settled point that Gothic architecture is "of Eastern or Saracenic origin," and Mr. Bentinck would hardly have dogmatised on that point had he been properly *au fait* with recent architectural criticism and deduction. The idea of Western Gothic being specially connected with Saracenic architecture in its origin belonged to the period when it was supposed that the pointed arch was the principle and essence of Gothic architecture. Not only is this view no longer held by the leading students and critics of architecture, but it is pretty well admitted, whatever may be thought as to the importance of the pointed arch in giving the character of the style, that this form of arch in Western building grew naturally out of certain constructive necessities and difficulties, and that Pointed Gothic has a far closer connexion with the round-arched Romanesque styles than with anything Saracenic. What Mr. Bentinck means by saying that a Gothic building cannot be constructed without windows that give no light, and a front that is a sham, he may possibly know, but we certainly do not. No Gothic front can be called one-half so much a sham as the fronts of the Renaissance churches of Italy, which were so completely and purely ornamental as to be built in general quite separately and at a different time from the rest of the building (some of them have never been built yet). He complains that a Gothic building has shafts which carry nothing; but here he is confusing the facts of building with its ornamental expression. The only sense in which the jamb-shafts of Gothic architecture (to which we suppose allusion is made) can be said to carry nothing is in the practical sense that the mouldings above them would not in many cases come down if they were removed. But the eye requires something for the archivolt mouldings to spring from, and that something can hardly take a more appropriate form than a shaft and capital. We might ask Mr. Bentinck whether there are not a few sham columns in Renaissance architecture, which carry nothing and are of no use. Then when he comes to talk with so much admiration of Wren (in which, of course, in general we entirely concur), he surely cannot be aware that Wren's great building, besides having a front which is at least as much a sham as any Gothic cathedral front, is one gigantic sham in the whole of the upper story of the nave, not to speak of the double dome: and as to artistic merit, no person in his senses, or with the remotest idea of what constituted artistic ornament, would venture to compare the best ornament of Wren with good Mediæval ornament. Then again, with reference to the practical criticisms of Wren on the construction of Westminster Abbey, which are, no doubt, quite true, Mr. Bentinck thinks they entirely disposed of the idea that the Mediæval builders were better constructors than the Romans. Now, we do not believe any critic whose opinion is worth anything ever said they were. The difference was of another kind. It is not that the Mediæval builders constructed better, but that their design and manner of building was in accordance with the construction, and was their own invention springing naturally out of the practical method employed; while the Roman and Renaissance

design is generally unrelated to the construction, and frequently totally contradictory of it. As to Mr. Bentinck's criticisms against overloaded ornamentation in Gothic, he has been looking at and thinking of florid specimens of late Gothic, which, however, are hardly so overloaded with ornament as most Roman designs, nor with such bad ornament; while the best Gothic works of the early period in England are almost as pure and harmonious in style, and in the restrained disposition and distribution of ornament, as Greek buildings.

Such an attack as Mr. Bentinck has made upon existing fashions and ideas in architecture may do no harm, but rather good, in stirring people up to think for themselves about the subject, and the reasons for their likings and dislikings. But criticisms of this kind will hardly produce the effect intended by those who pronounce them, or receive any serious consideration, unless they are worded more moderately and critically, and with more recognition of the two sides of the question, and somewhat more accurate historical and critical knowledge of architecture than are displayed in the lecture we have printed.

THE DECLINE AND FALL OF BRITISH ARCHITECTURE.*

ALL SAINTS, Margaret-street, had scarcely been completed when the Gothic Revival was torn asunder by a schism, which struck a heavy blow at the very foundation upon which it had hitherto rested. A powerful section of the modern "Goths" made the discovery that Gothic was, after all, not a national style, and that its English form, which has been so much upheld by Pugin, should be abandoned in favour of importations from Italy and France, which were alleged to be preferable in every respect. Mr. Ruskin was the leading exponent of these ideas, and the publication of the "Seven Lamps of Architecture," and the "Stones of Venice," gave a new direction and a new motive to the Gothic Revival. The author of this new phase of art, which Mr. Eastlake calls "Ruskinism," did not approve of the Gothic Revival, as ordinarily understood. He limited the choice of a style to four particular types, which he selected, viz., 1. Pisan Romanesque; 2. Florentine of Giotto's time; 3. Venetian Gothic; 4. English Gothic of the time of Edward I.; and he proposed, moreover, that a universal system of form and workmanship should be adopted and enforced, but how this last condition was to be secured he failed to explain. I desire to speak with the greatest possible respect of Mr. Ruskin, not only because he is to some extent our neighbour, and a man of great ability and truth, but because I have reason to think he has of late greatly modified his opinions, and is not ashamed to own it; but at the period to which I have just referred, when the architectural mind was hesitating, he rushed into the fray, and by the extraordinary power and eloquence of his writings turned the heads of those who did not know or did not think, and effected irretrievable mischief. The well-known Oxford University Museum was the first great practical result of Mr. Ruskin's teaching. In designing this building, the architects deliberately dismissed all Pugin's cherished principles to the "wall and to the waves," and exclusively adopted the foreign element. The result of their labours is so well described by Mr. Fergusson, in his "Handbook of Modern Architecture," that I will give you the substance of his criticism as far more instructive than any I could myself devise:—"This Museum was designed to be Gothic in conception, Gothic in detail, and Gothic in finish. Nothing was to betray the hated and hateful nineteenth century, to the cultivation of whose sciences it was to be dedicated. Unfortunately the style selected on this occasion was not English Gothic; for the architects having exhausted all the specimens found in their books, and, according to the new canons of art, being obliged to be original without being allowed to invent, they have latterly, in consequence, been forced to borrow from Germany or Lombardy such features as are yet new to the English public. Generally speaking, these foreign forms and details are neither so beautiful nor so appropriate as our own; but if the architect can produce a certificate of origin, and prove that he has copied and not invented them, the public are satisfied that all the exigencies of true art have been complied with. The roof of the Great Central Hall of the Oxford Museum, and the ironwork that supports it, are made purposely clumsy and awkward. The lecture-rooms are cold, draughty, and difficult to speak in. The library is a long, ill-proportioned gallery, with a rudely-constructed roof, painted in the crudest and most inharmonious colours; the windows glazed in the least-convenient manner, with the worst possible glass; and the bookcases arranged not to accommodate books, but to look monkish. You take a book from its press, and are astonished to find that men who could spend thousands on thousands in this great forgery, have not reprinted Lyell's "Geology," or Darwin's "Origin of Species," in black letter, and illuminated them, like the building, in the style of the thirteenth century. If the student of architecture gains but very little gratification, in an artistic point of view, from a visit to the Oxford Museum, he may at least come away consoled with the reflection that the Syndics of that learned University have gone far in producing a *reductio ad absurdum;* and that a system which results in such a mass of contradictions and follies as are found here is too childish long to occupy the serious attention of grown-up men, and when the fashion passes away we hope for something better. Till it does, architecture is not an art that a man of sense would care to practise, or a man of taste would care to study."

Although the Oxford Museum was a manifest failure, and pleased nobody, yet the novelty-mongers felt neither discouraged nor disgraced. True, they had set up a hideous, extravagant, and inconvenient structure; but, on the other hand, they had converted the Oxford Dons, who had plenty of money to squander, to the pleasing belief that the architecture of their collegiate predecessors was merely tentative, and that to them was reserved the glory of elucidating true principles. Thus, set in motion by clever but unsafe guides, impelled by that craving for change which is distinctive of our age, and aided by the fostering hands of both universities (wherein, except the Cambridge Fitzwilliam Museum and a few other rare examples, not a shred of respectable architecture has been erected for the last eighty years), the "Fall" of British architecture commenced in real earnest. While Pugin chastised with whips, the architects of the "Fall" chastised with scorpions. Like the fox that had lost its tail, they taught their hearers that deformity was preferable to beauty, distortion to proportion, the imperfect to the perfect. Eccentricity, exaggeration, and extravagance became with them the real orders of the day!

In dealing with the architecture of the "Fall," I shall pass by their attempts to reproduce what is called "Venetian Gothic" and "Italian and German Romanesque," for such impositions are too transparent to need criticism, and proceed to their greater efforts which depend upon an eclectic process whereby Gothic and mutilated Classic details, stolen from all ages and countries, are huddled together in a fashion so wild and illogical that they stand, on their own showing, in direct contradiction to the Mediæval motives which they profess to follow. Many popular architects now-a-days advise their clients and customers to build in Gothic, "because," say they, "this style is elastic and subject to no precise rule. You can have a door or a window here or there just as you please. If an irregular front suits your purpose, or if you fancy projections, or towers and turrets to be raised without reference to the symmetry of the outline, the authority of the style we recommend will give you what you want, and the effect cannot fail to be picturesque." No reasoning can be more unsound than this; it is merely a device to cover ignorance and incapacity. The real Gothic architects had no such ideas. They held equally with the ancients and with the "Classical Revival," that to insure beauty *uniformity* was an absolute condition, and they adhered to this principle with a tenacity that no inducements could relax. The most cursory observation of Old English Gothic buildings will show that their irregularity is not due to *intention*, but to *accident*, for the true Goths, as a rule, worked only in the particular style which they considered to be the best. Such notions as making "a thing to match," or "levelling down to the imperfections of a ruder time," never occurred to their acute and cultivated minds; on the contrary, they sacrificed advisedly, and without scruple, the designs and ideas of their predecessors, in order to give harmony and regularity to their own. There is an instance in our own mother-church at St. Bees. What was originally the lady-chapel at the east end of the church was built in the thirteenth century, and there is no more resemblance between that and the body of the church than there is between the lady-chapel and St. James's Church. The architects of the thirteenth century, when they added St. Bees Church, added it in the style that they thought best; and any further additions would be made according to the style of their own time, just as my friend, Mr. Fletcher, explained in an excellent lecture which he delivered the week before last at Cockermouth, when he referred to Carlisle Cathedral. The architects never levelled down to the imperfections of ruder times. These facts—for such they are—the modern Goths and their employers have never been able to understand, and their combined persistence in stopping their ears to the teaching of the past has led to the incoherence of design and confusion of detail which are the characteristics of our luckless period. Their vices are most strongly marked in the municipal and domestic buildings which are now rising in every direction, and which seem to compete as it were for some prize destined to the most "ugly." In the north, the Assize Courts at Manchester and the Town-hall at Preston are leading examples of the "Fall." The interior of the former has been much praised for its convenience, but the exterior is merely a hotch-pot (the Italians would say "Pasticcio" *Anglicè* "muddle") of pure foreign Gothic detail, strung together without either unity of purpose or grandeur of effect, and the tower which rises from the rear apes to be an Italian "Campanile," but is, in fact, a ventilating shaft. Nor has the architect the excuse of unintentional error to defend these strange combinations, for his more recent works—such as Pembroke College, Cambridge, and a university club in St. James's street, London—show that it is his purpose to devise barbarous and uncouth effects, precisely as in days gone by the sect of Quakers invented their costume as a standing protest against the worldliness of beauty. [Mr. Bentinck here produced a representation of a recently-erected church, the quaint architecture of which, he said, was called a modern adaptation of the Romanesque. He did not see why there should not be a modern adaptation of Stonehenge. Should such a style be tolerated at all? It was an imitation of the rudest architecture that was ever in this country. It was a corruption of the Classic. The windows were actually square, with a semicircle on the top to try to convert them into Norman, Saxon, or whatever they might like to call it. To any one imbued with right principles going into such a place, the first impulse would be to turn away again.] The illustrated pages of the architectural periodicals disclose to us weekly how fatally in truth the "Fall" has set in, but the worst of these attempts will soon be cast into the shade by the huge and monstrous "Palace of Justice" which is now rising into supreme ugliness on the west side of Temple Bar. A noble and dignified elevation might at least have been expected, but the architect threw away his opportunity, and from sheer ignorance of the principles of his art has broken this great space into at least fourteen compartments, pierced them with irregular and deformed windows, and intends to add a lop-sided tower, which, as an able critic has tersely written, will not be worth the cost of its foundation. Let any reasonable being examine these new courts with attention, and let him then walk down to Westminster and enter the Abbey. If the contemplation of that glorious and unsurpassed interior does not persuade him that Gothic architecture is dead, and that not even a million of the public money will resuscitate it, I shall be surprised indeed.

But the mention of Westminster Abbey leads me to the consideration of another deplorable result of the "Fall," namely, "The present condition of Church Building." I have shown you how, for the first quarter of a century of the "Gothic Revival," nothing was admissible but to copy literally ancient English work, and how gradually Pugin's influence was sapped and fell away. At last his fading light has been finally extinguished by the recent erection of the Church of St. Agnes, Kennington, which the newspapers report as being built in the "Middle Pointed" (English) style, but which does not possess a single English feature; for it is, in fact, a literal copy of the poor and lean churches, destitute of ornamentation, which abound in Flanders and the North of France. Beyond its extravagant cost, stated at 16,000*l.*,

* By the Right Hon. G. Cavendish Bentinck, M.P. A lecture delivered at Whitehaven. See p. 187, *ante*.

and its Continental aspect, this church is only remarkable as indicating the desertion of the leading architect of the English "Goths" to the foreign party, and we may assume that ere long his followers will submit to the same authority. Thus the beginning of the end is in sight, but meanwhile we are still tied by the Church architects of the "Fall" to the observance of unnecessary and obsolete practices, some few of which I will now describe.

Our modern churches must be strictly laid out according to the Mediæval plans, notwithstanding that these forms entail enormous loss of space, and impede both the sight and hearing of a large portion of the congregation. High-pitched roofs are declared to be obligatory, but these roofs, except in isolated cases, are neither solid, convenient, nor beautiful. They perish easily; they interfere with sound, and give an effect of intense depression to the external elevations, which, in most cases, present a confused mass of ugly penthouses. I have already stated Wren's condemnation of this form of roof, which no good modern architect has ever used, and which was virtually abandoned by the English "Goths" themselves about the middle of the fourteenth century.

Again, as concerns church decoration, no element is admissible unless derived from some authority dating, at latest, from the Edwardian period. Painting and sculpture, to be orthodox, must be conventional. In the fourteenth century power to draw the human figure correctly had not been acquired; therefore, the matured knowledge of the nineteenth is compelled to repeat the earlier imperfections. The holy personages now portrayed on the windows and walls of the sanctuaries are goggle-eyed, crooked-necked, and bandy-legged, for the slightest attempt to give them the noblest forms with which the Creator has endowed the human race would be profanity itself, and ensure their summary exclusion. Experience dearly bought, especially by Parliament, has shown that painting in oil and on canvas is the only pictorial effort which will certainly withstand our trying climate; but this branch of the art was unknown in Northern Europe until a period comparatively recent, and it is, therefore, repudiated by the church architect of the "Fall," who will agree only to water-colour or mosaic on a wall. The great Italian schools of painting all over Europe were created and supported by the requirements of the Church, and after oil-painting came into use it was generally adopted for ecclesiastical purposes. I am at a loss, then, to conceive any reason, religious or logical, why the same rule cannot apply now. The annual exhibitions of the Royal Academy make known to the public numbers of artists whose labours would, both artistically and economically, be preferable, in every way, to the coarse daubs and outlandish "reredos" which are patronised by the so-called Church architects, and executed by mechanics employed by enterprising firms and "limited companies." But the decrees of the "Fall" decide the contrary.

The last point, relating to this branch of the subject, with which I will trouble you, is "Church Restoration," a question which has, as we know to our cost, been prominent for many years past, and has given rise to much controversy. Being myself a strong advocate for the preservation, in its integrity, of ancient work, I feel that those are its best "restorers" who interfere with it the least, and I cannot join in the unlimited abuse hurled at the clergy and churchwardens of the last century because they, as a rule, merely patched up, and mended, and left the buildings very much as they found them; for the white and yellow wash which they used so plentifully, and the pews they set up, did comparatively but little mischief, and can easily be removed without any serious detriment. But the moment "Gothic architecture" began to be "studied" and "understood," that frenzy for destruction commenced, which has continued for many years, and which, I regret to say, rages at the present time more perniciously than ever.

James Wyatt was, no doubt, a great offender in his day, but I concur with Mr. Fergusson, who writes:—"We are horrified at what Wyatt did with our cathedrals, and full of wonder at the blindness of our fathers in not perceiving how wrong he was. Do we feel sure that our children will not be equally shocked at what we are now doing with the same buildings?" I believe our children will perceive that we have eaten the "sour grape"; because now, at the eleventh hour, when the sacrifice is well nigh accomplished, and the victims expiring, we find the "Goths" of the day divided into two hostile camps, each denouncing the other as the authors of the crime. Sir Gilbert Scott, in his address as president of the R.I.B.A., in 1873, said:—

"Our old buildings too often, nay, in a majority, I fear, of cases, fall into the hands of men who have neither knowledge nor respect for them, while, even amongst those who possess the requisite knowledge, there has too often existed a lack of veneration, a disposition to sit in judgment on the works of their teachers, a rage for alteration to suit some system to which they had pledged themselves in their own works; and even the preposterous idea that the ancient examples they were called upon to repair were a fitting field for their own originality! Nor have the official guardians of our ancient buildings exercised much restraint upon these vagaries; on the contrary, they have too often been most culpably careless as to the hands to which they have committed their trust, and are usually the incitors to ignorant tampering, the needless removal of valuable features, and even to the condemnation and destruction of the buildings under their charge. The result has been truly disastrous: so much so, that our country has actually been robbed of a large proportion of its antiquities under the name of 'restoration'; and the work of destruction and spoliation still goes on merrily; while, at the public festivities by which each *auto da fé* is celebrated, we find ecclesiastical dignitaries, clergy, squires, and architects congratulating one another on the success of the latest effort of Vandalism."

These are bold sentiments, and strictly true. But, according to Sir Edmund Beckett, a powerful section of the Gothic party actually charge Sir G. Scott with unfaithfulness to his own ruling, and declare themselves to be the only representatives of "Conservative" and "Vigorous" restoration. Sir E. Beckett endeavours to refute these "Vigorous" restorers, alleging that our great churches, practically speaking, are conservatively restored by Sir G. Scott and his school as much as possible in the *spirit of their own builders*, and defies any one to prove to the contrary. I am afraid that Sir Edmund Beckett, when he wrote thus, had neither seen nor heard of the devastation now in progress at Salisbury Cathedral, or his logical mind would reject his own proposition. Salisbury Cathedral (which I saw a fortnight ago), "like Niobe, all tears," is ever in misfortune. While the results of the "sack" by Wyatt were yet distinctly visible, more modern "Goths" in 1856 disfigured and virtually destroyed the chapter-house, by painting all the figures so as to make them look like dolls in a toyshop, and now the disaster is complete. Fifty thousand pounds and upwards have been expended, and how has the money in great part been applied? Not in reverent restoration, not in judiciously removing displaced old work to original positions; but upon the tasteless vagaries of a so-called church architect. Thus the choir is paved with gaudy gingerbread tiles, and, what is worse, mechanics are employed to daub the walls of the noble choir with coarse and flaring colours, and its roof with sham Mediæval paintings,—in direct violation of the *spirit* of the old architects, which was "art," not "manufacture." It is incredible that capitular bodies should have power to do such deeds, and the interference of the Legislature at an early period would seem expedient.

And, now, having thus followed the downward course of British architecture, we come to the question whether there is any remedy for the evils which are admitted to exist. Suggestions without number are being constantly made from all quarters.

Mr. Fergusson holds that both the Classic and the Gothic styles are wrong, and sets his "hope for architecture" upon what he terms a *tertium quid*—a style which he says is sometimes, for want of a better name, called Italian, but which he thinks should be called the "common-sense style."

Accomplished writers in the *Quarterly Review*, who made some stir by articles published in 1872 and 1874, contend that the "hope of architecture" rests upon disestablishing architects "bag and baggage," and establishing builders and handicraftsmen, or working-men, in their stead.

Sir Edmund Beckett, a voluminous amateur writer and critic, who, though a professed Goth, is more candid and sensible than any one of the party, in his recent book on building, ridicules the *Quarterly* notions, and lays down that no new style is possible, and that if we are to build artistically we must adhere to the old forms, not excluding Classic.

I have cited these opinions to prove how different the casts of thought are upon the subject, and I could mention many more authorities, all showing a divergence of opinion impossible to reconcile. But, in this wilderness of confusion I nevertheless perceive a safe and straightforward path which will extricate our struggling senses from the besetting difficulties, and which will avoid failure, if indeed it does not ultimately lead to success. As we have now reached our second childhood in art, if we would not perish altogether we must needs submit to another birth,—in short, to another "Renaissance," as it is sometimes called; for, in our present enfeebled condition, if we attempt to run before we can walk, we shall only leap forward in the dark, with the absolute certainty of falling to rise no more. Therefore, we must take our stand upon a system governed by wise and well-tried laws, and then obedience, patience, and discipline will give us victory where we now suffer defeat.

Our only alternative, then, according to my view, is to follow the course adopted by Inigo Jones before the great Rebellion, and by Wren after the Restoration, and conform to the teaching of the great masters of architecture, because this teaching is certain and intelligible, and a sure foundation upon which genius and ability can thrive.

One obvious cause which maintained the long and brilliant series of successes achieved by Jones, Wren, and their English followers, is that all those who then practised art, even in the inferior branches, were united in a common cause to elevate their work by emulating the best masters, and following the best models, and were free from the ignorance and darkness which in our time has led to copying the inferior and the imperfect, and to the never-ending "Battle of the Styles." Nor was originality in any way fettered. The original architecture of past ages may be followed upon two principles,—the one true and the other false. The true principle is to adapt the invention to the requirements of the time; the false principle is to do exactly the reverse. Upon the former principle the Romans adopted the architecture of Greece; and thus Palladio, Sansovino, and the great Italian architects of the sixteenth century founded a school which has hitherto held, and must continue to hold, its ground against all comers. Of that school Jones and Wren were disciples, and their power of thought and purity of taste exercised a beneficial influence on English art to the commencement of the French Revolution. "Genius," says Sir Joshua Reynolds, "at least what is generally so called, is the child of imitation; it is in vain to endeavour to invent without materials on which the mind may work, and from which invention must originate. Nothing can come of nothing." The false principle upon which the modern Goths proceed either appropriates wholesale the inventions of an ancient style in the mass, or else employs them, not as their authors intended them, but perverts them ignobly and by main force, as it were, to serve the purpose of the hour. Practical results are, after all, the most convincing arguments. The buildings of the "British Classical Revival," from the earliest work by Jones to the latest by Robert Adam, may be sneered at as formal, cold, and uninteresting, but they were never bad; and the most hostile critic dare not venture to decry the excellence with which all external and internal ornamental fittings, such as windows, doors, chimney-pieces, glasses, frames, and furniture were designed and executed. The present market value of these works sufficiently attests their high merit, and even a greater value attaches to the productions of the contemporary silversmiths, which are estimated by their artistic qualities, and not by their weight in metal.

For reasons which will be obvious I forbear to mention any building in this town; but if you inquire whether any good architectural work exists in this immediate neighbourhood, I refer you to an adjoining parish, where you will find Moresby Hall, which is thoroughly English, and yet possesses all the qualifications required by Vitruvius, and which is tenanted by a most excellent tenant, who will take the utmost care of it. It is both solid and commodious, and so universally acknowledged to be beautiful that tradition has assigned the design to Inigo Jones himself. Carry Moresby Hall in your mind as you travel by rail to Manchester, and if you will impartially trust your common sense, you will see how superior our Cumberland gem is to the "harum-scarum" mansions of modern Lancashire. If you ask me to show you a beautiful and genuine English interior, we will go to Cockermouth and enter the house where the poet Wordsworth was born, and where we shall find the ever-hospitable welcome of our friend, Mr. William Wood. We will ascend into the drawing-room, and there you will behold a beautiful proportioned apartment, strictly classical according to rule, but executed, both as regards

its principal features and its details, in the entire spirit of English originality.

The career of the celebrated Thomas Chippendale reads a useful lesson to the present generation. He was a London tradesman, and kept a cabinet-maker's shop in St. Martin's-lane, and yet in his own day he gained a European reputation, which, since his death, has increased rather than diminished. In 1754 Chippendale published a large and beautiful volume (unhappily now so scarce that even the British Museum does not possess a copy), under the title, "The Gentleman and Cabinetmaker's Director, being a Collection of Elegant and Useful Designs of Household Furniture and other Ornaments, to which is prefixed a Short Explanation of the Five Orders of Architecture and Rules of Perspective. By Thomas Chippendale, St. Martin's-lane. March 23rd, 1754."

Chippendale thus identified cabinetmaking with the craft of architecture, and in his preface states the following unanswerable argument in support of his contention:—"Of all the arts which are either improved or ornamented by architecture, that of cabinetmaking is not only the most useful and ornamental, but capable of receiving as great assistance from it as any whatever. I have, therefore, prefixed to the following designs a short explanation of the five orders. Without an acquaintance with this science, and some knowledge of the rules of perspective, the cabinetmaker cannot make the designs of his work intelligible, nor show, in a little compass, the whole conduct and effect of the piece. These, therefore, ought to be carefully studied by every one who would excel in this branch, since they are the very soul and basis of his art." If, then, the cabinetmakers in 1754 thought it necessary to undertake such studies and acquire such knowledge, the architects and builders in 1877 should go and do likewise, and rescue British art from the discredit which it has so largely incurred.

I maintain that in the instruction given in schools of art all pupils should be made to understand thoroughly the principles of the great Italian architects of the sixteenth century, and of the English of the seventeenth century. They should know all the rules of architecture and perspective, and when they know these they may do something original. I will mention one incident which will illustrate my present argument. Some years ago the question arose of erecting a new apse or chancel at the Church of St. James, in this town. The then incumbent consulted a church architect, who sent in a most villainous design, which I implored the incumbent not to accept; and said that rather than the church should be spoiled I would undertake the matter myself, without any architect at all. I summoned my assistant, and all we had to do was to complete the church according to the intention of the original architect. It was plain enough, and I do not think any one ever thought that the work was done unsatisfactorily. If you had had to engage one of these church architects you would have one of those harum-scarum things which is neither fish, flesh, nor fowl; and instead of being a credit it would be a disgrace. The church architects will not learn to follow the example of men to whom I have referred, and learn the alphabet of their profession.

I have endeavoured to set the facts of the case before you to the best of my ability. I have said much that is contrary to fashion,—much with which you will disagree; but I know that I have spoken conscientiously, and I am firm in conviction that the day is not far distant when that belief in the superiority in the old masters, which has been so rudely shaken, will resume its sway, and then only shall we tread the right road to improvement which this generation finds it so difficult to discover.

Permit me, in conclusion, to read to you the views of Sir Joshua Reynolds, our greatest painter, on this momentous subject, who, in his admirable "Sixth Discourse," addressed to the students of the Royal Academy, on December 10th, 1784, expresses himself as follows:—

"The great use of studying our predecessors is to open the mine to shorten our labour." "From the remains of the works of the ancient the modern arts were revived, and it is by their means that they must be restored a second time. However it may mortify our vanity, we must be forced to allow them our masters; and we may venture to prophesy that when they shall cease to be studied, arts will no longer flourish, and we shall again relapse into barbarism." "Study, therefore, the great works of the great masters for ever. Study, as nearly as you can, in the order, in the manner, and on the principles on which they studied. Study nature attentively, but always with those masters in your company; consider them as models which you are to imitate, and at the same time as rivals with whom you are to contend."

THE LATE MR. TALBOT BURY, ARCHITECT.

WE see with regret the announcement that Mr. T. Talbot Bury died on the 23rd ult. at his residence, 50, Welbeck-street, Cavendish-square, aged sixty-five. Mr. Bury was a pupil of Augustus Pugin, and in the early part of his career assisted Augustus Welby Pugin as lithographer and engraver in the production of some of Pugin's works on Furniture, Ironwork, and Goldsmiths' Work, as well as in his "Examples of Gothic." Mr. Bury also engraved the principal plates in Owen Jones's well-known work on the Alhambra. He was at one time in partnership with Mr. Chas. Lee, of Golden-square, but the connexion did not last very long.

His works as an architect, several of which were illustrated in our pages, comprise the church at Bovington, Herts; Christchurch, Battersea; All Saints, Clapham; St. John's, Weymouth; St. James's, Dover; St. Ann's, Stamford-hill; St. Andrew's, Beadpole; St. Fagan's, Aberdare; St. Peter's, Symondsbury, Dorset; All Saints, Windsor Forest; and churches at Kilmington, Devonshire; Askerswell, Dorset; Aldenham, Herts; Child's-hill and East Moulsey, Middlesex; St. John's Common, Sussex; Christchurch, Kintbury, Berks; Burton; Jeffreystone, Pembrokeshire; Upper Heyford, Oxfordshire; Welford and St. Mary, Woodlands, Berks; Southleigh, Devon; and others; houses and parsonages at Welford, Kintbury, East Moulsey, Child's-hill, Hook, Barton-grove, Hanger-lane, Middlesex; Aberdare; Windsor Forest; Weymouth, &c.; various schools; two hotels at Weymouth; a market-house; a residence in Windsor Forest for the late Mr. Van de Weyer, then Belgian Minister, which cost 34,000*l.*; mansions at Falcondale, Lampeter, and New Tonbridge, near Brigstock, Northampton; alterations to Shaw House, Newbury; and Haughton House, Northamptonshire; and some other public and private buildings. He wrote a "History of the Styles of Architecture" for Weale's series, and contributed on more than one occasion to our pages.

In conjunction with Welby Pugin he assisted in developing the designs of the late Sir Chas. Barry for the decorations of the Houses of Parliament. When the youngest Pugin some years since claimed for his father the merit of originating what had been done, Talbot Bury immediately replied, doing justice to his employer, Barry, and ignoring the claim that was set up.

All who have attended the congresses of the Royal Archæological Institute, while regretting his loss, will remember his genial good nature and his constant desire to contribute to their comfort and to the success of each meeting.

Mr. Bury became an Associate of the Institute of Architects in 1839, a Fellow in 1843, and in 1863 was elected a Fellow of the Society of Antiquaries.

ANOTHER VIEW OF DR. SCHLIEMANN'S FIND.

UP to the present time, we have only heard the views of the explorer of Mycenæ as to the value of his discoveries. It is, therefore, interesting to read the following letter from Athens (published in the *Cologne Gazette* of the 16th ult.), in which an estimate of the discoveries is made by a competent critic. The writer says:—

"The gold ornaments contained in one of the four boxes sent from Mycenæ were exhibited for a few days at the Bank, and the most eminent men of the city were invited to inspect them. Their criticisms form the general theme of conversation. The learned of Athens seem to think the name of Agamemnon already too young, and they date by King Danaos. Others acknowledge readily that there are many ancient pieces, especially seals, among the objects found; but they cannot recognise in the large quantity of gold ornaments anything characteristic of the oldest epoch of Asiatic gold-work, massiveness of metal, chastity of style. The gold objects are all hammered out of thin gold-plate, the forms and drawings are mostly without style, pointing more to a period of decay than the remote time during which the first specimens of Phrygo-Lydian art reached the shores of Europe. The locality where they were found also does not guarantee such a high antiquity. For although the perpendicular pits in the castle date from far distant times, no one has yet been able to prove that those pits were originally graves. They may very well have been underground stores, as they existed in all old castles; and those spaces may afterwards have been used as sepulchres by princely races which nestled here in much later times. The newly-discovered graves bear no traces of the monumental art of heroic times; and the unburnt bones lowered into the deep, and covered by masses of earth, by no means testify to the Homeric age. But buildings of a very late epoch are without doubt in the immediate neighbourhood of the graves. Under such conditions, it is easily explained how the chronological determination of the graves vacillates between the times of Danaos and those of the Byzanto-Frankonian middle ages; and as it will be months yet before all the objects of the find will be exhibited together, it is impossible to pronounce a safe judgment at present. The public both here and abroad, which already now demands decisive answers to their inquiries, will therefore have to curb their nervous impatience. The treasury of Priam was already found four years ago, and it has not yet been satisfactorily solved to what epoch those ornaments belong, which by some are considered as having decorated the neck of Andromache, while others look upon them as trinkets from a Turkish harem. The gold of Ilium soon disappeared, and has been withdrawn from discussion. The golden treasures of Mycenæ, however, because they are public property, will be exhibited as a complete collection, but hardly before April. No sane person has doubted the high antiquity of the pottery and clay figures found at Ilium as well as at Mycenæ. The age of the gold objects, in both places, however, is still problematical, the different chronological estimates diverging by thousands of years. The history of Mycenæ is generally confined to the times of the descendants of Atreus, and is considered finally concluded with the year 460 B.C. The many later buildings, which have been uncovered recently, prove that this is a mistake; and it is also wrong to consider the middle ages of Greece, with its splendid courts, as non-existent because we do not know it. The present problem will give rise to fresh inquiries, and lead before very long to important results."

GOLD AND SILVER IN KING SOLOMON'S TIME.

SIR,—With reference to your recent interesting article on Dr. Schliemann's discoveries, I send an extract which will show that the writer was in error on one point, because it was *gold* and not *silver* that was nothing accounted of in the days of Solomon.

1 Kings x. 21.—"And all King Solomon's drinking-vessels were of gold, and all the vessels of the house of the forest of Lebanon were of pure gold; none were of silver: it was nothing accounted of in the days of Solomon."

Verse 27.—"And the king made silver to be in Jerusalem *as stones*." EWAN CHRISTIAN.

*** If we admit with our correspondent the power of the colon, his quotations nevertheless surely serve to prove the correctness of the observation to which he objects. How does the first passage stand in the Hebrew?

The Royal Dramatic College.—A public meeting has been held in the Saloon of Drury-lane Theatre for the purpose of considering what steps should be taken to relieve the institution from its perilous financial position. Lord William Lennox presided. It was stated that the Council were without funds to provide for current expenses, and that if the public and the dramatic profession did not come forward and help at this crisis they would have no alternative but to dispose of the building and thus deprive the inmates,—aged and infirm actors and actresses,—of their home. Upon the motion of Mr. Webster, seconded by Mr. Anson, the meeting pledged itself to do all that was in its power to re-establish the institution in a good position. An account of the money that has been squandered on this establishment would startle the public. An entirely fresh system of management is needed.

New Auction Mart at Forres, N.B.—A new auction mart for the sale of cattle, furniture, &c., has been opened at Forres. The cattle-shed is 90 ft. long by 24 ft. broad, partly covered in, and will hold from eighty to a hundred cattle. Fifteen pens have been put up for pigs, and five for sheep. The contractors were,—Messrs. Tulloch & Forrest, joiner work; Mr. Deason, slater work; and Mr. Squair, mason work.

LONDON STREET IMPROVEMENTS: 1877

THE Parliament of the metropolis is nothing if not practical. Nobody who takes a decent interest in its proceedings can have forgotten the congratulatory reunion of its members when Northumberland House was presented to the public. A duke had been paid a big price for his house and land, and a bigger one was to be got out of eager and speculating individuals. The Chairman of the Metropolitan Board rattled the loose coin in his pocket, and declared, over the beaming countenances of his supporters, that if any of their constituents wanted the land they must be prepared to lay down plenty of solid lucre. It is consequently difficult not to admit the practical character of the Board. We will not, however, suppose for an instant that: given the necessity of making a new street, say from the Strand to Regent-circus, the Board deputes any two of its members—regular attendants at the meetings, and remarkable for their practical conclusions—to point out the true direction or inclination of the same. We will not surmise that these gentlemen resort to the shadow of St. Martin's Church, and having chosen the hardest-headed cabman they can find there, order him to drive them to the "Criterion,"—the result being the widening of the route taken by the cabman aforesaid. This kind of rule-of-thumb science is no doubt sometimes successful, and in the question of metropolitan improvements art is only an intruder. Not that we would place the claims of the latter above those of utility. We would only hint that a little more artistic feeling, a very little knowledge even of the experience of similar difficulties in another and really beautiful European capital, would enable our Ædiles to perceive the recurring incongruity which spoils their projects of improvement. This, although patent in a part, at least, of the latest scheme of the Metropolitan Board of Works, is unperceived by a House of Commons so careless of results, either judged from a utilitarian or an artistic point of view, as to complacently acquiesce in the explanations of an official advocate who stultified a principal feature of the Board scheme by properly withdrawing the only item of it which was supposed to be objectionable.

The Bill to be called, when it becomes law, "The Metropolitan Street Improvements Act, 1877," was hurried through the second reading on Thursday, the 22nd ult.; and it is now referred to the investigation of an ordinary committee. The important piercings and minor rectifications at the West End which are proposed by the Bill we leave for the moment; and come at once to a host of indubitable improvements which affect many and remote parts of the town. At Westminster, Abingdon-street is to be enlarged on its eastern side, and thence the roadway on both sides is to be equalised and increased to within 80 yards of Ponsonby-place; and the embankment recently formed at the south end of the Houses of Parliament is to be continued, we presume, to join that actually in existence in front of the Millbank Penitentiary. The road originally known as Gray's-inn-lane is to be improved: that is to say, Gray's-inn-road is to be widened on its eastern side from Holborn to Henry-street; and a short street is to be made, partly by a viaduct, from the corner of Liquor-pond-street and Gray's-inn-road to Mount Pleasant,—a once salubrious spot close to Coldbath-fields. The Kentish-town-road is to be widened, on its eastern side, not far from Clarence-road. In Islington, Goswell-road and St. John-street-road* are both to be widened in parts. In Hackney, Mare-street is to be improved from near its junction with Amhurst-road to a point about 80 yards north, opposite to the churchyard. On the other side of the river, Tooley-street and some adjacent streets are to be widened; while Bermondsey-street is to be increased in width on its western side from Snow's-fields to Star-corner. A new street is to be made from the Southwark-bridge-road to Blackman-street at its junction with Mint-street, thus opening out a direct communication between Southwark Bridge and Great Dover-street. Alterations whereby Jamaica-road and Union-road in Bermondsey and Rotherhithe, the Camberwell and Peckham high roads, and the approaches to Deptford Bridge will be considerably improved, are proposed by the Bill. All these form a comprehensive programme of petty benefits which can be executed at comparatively small cost and without much destruction of houses or interference with property in land. But the important change contemplated, in Soho and around Leicester-square, is worth, we think, a little reconsideration,—even though sixteen years have elapsed since we first suggested a part of it, and in a more artistic manner than is now proposed,*—before Parliament blindly sanctions its execution.

We venture to believe that the proposed route from the Strand to Regent-circus will be found to be not less rambling than the description given of it in the Bill is perplexing. This thoroughfare is to be formed "by the widening of Piccadilly on the north side, then by the widening of Coventry-street on the south side, and the widening of Princes-street on the west side, and thence by a short length of new street from the south end of Princes-street to St. Martin's-street at its intersection with Blue Cross-street, thence by a widening of Orange-street on both sides, and by a widening of Hemming's-row on the south side, and terminating at the east end of Hemming's-row." The plan† we publish today will show at a glance the irregular character of the proposed route. Objections to the two other streets refer not so much to the route as the details of the route. For instance, the manner in which the widening, or rather rectification of streets leading to such open spaces as Leicester-square and Soho-square is absolutely shirked, says little for the completeness of the scheme. It is perfectly true that such subordinate improvements can be effected after a principal route is made; but are they? As a rule, adjoining owners are in far too great a hurry, for many and different reasons, to build in the vicinity of a freshly-pierced thoroughfare, to think of improving the approaches to it. Neither is it usually their interest to improve them, nor has the Board generally time, inclination, or money enough to do more than complete the thoroughfare in question. It must, therefore, occur to all earnest reformers to advocate not only the study of a new route, but also of the subsidiary streets which lead into it. If this has really been done by the Board, there is nothing to show what such study has produced. But one thing is certain and inevitable, and it is that when the new streets are finished, correspondents however eminent may write to the newspapers, or publish pamphlets, about the error committed, without the ghost of a chance that their complaint will be even read. They must cry out before they are hurt; and we believe, or at least hope, that there is yet time to oppose, to advise, and to amend.

The probable results of the proposed improvements, as they concern the new streets at the West End of the town, are not difficult to foresee. Take the projected route from Trafalgar-square to Tottenham-court-road. On the west side of St. Martin's-place a slice of land adjoining the National Gallery will remain at the disposal of the Board; and if the National Gallery authorities will not purchase it, at probably an exorbitant price, it will be let for building purposes, and shops or dwelling-houses will be erected almost against the wall of the new picture-galleries. Again, in order to avoid touching certain property, the new street is to be curved round the back of it; and consequently one side of that new street will be composed, for a short distance, of a dead-wall enclosing the yards of houses in St. Martin's-lane. At the west side of the new street, at its junction with Hemming's-row, there will be an elongated triangle, sharply pointed at two of its extremities. Upon them we may expect to see built at one end a lofty shaft of a house, crowned with an attenuated box roof, and at the other a mediæval tower, perhaps, with an extinguisher, terminating in some elaborately-devised cast-iron vane. This triangle, moreover, blocks the most frequented entrance to Leicester-square. Passing on to the other side of Cranbourne-street, the new thoroughfare creates a number of pointed or acutely-angular sites. Preserving the western side of Cranbourne-passage, it knocks off a bit only of Newport-court, a narrow alley like an Oriental bazaar, devoted to the sale of butchers' meat, and pestiferous on a warm Sunday night. Further on, the western side of Crown-street is to be left in its actual integrity; and though the common dictates of personal interest would naturally induce the freeholders of this side of Crown-street to pull down and relet, such is the complicated and uncertain character of house property in London, that a dozen or more years may elapse before so desirable a result will be attained. In the meantime, the value of the houses erected upon the new side of the street will be vitiated, and their quality in the first instance affected, by the propinquity of the old and miserable tenements standing opposite to them. The proposed street from Holborn to Regent-circus is attended with the same objection. The whole of one side of Dudley-street, of King-street, and of Richmond-street is to be left untouched. The land in that part of town belongs to several owners, and the majority of the houses possess a frontage of less than 20 ft. If some of the owners do pull down the actual houses, it may be confidently expected that they will, and indeed must, erect others of exactly the same type; and thus a host of narrow and inconvenient houses of two small rooms over two small rooms, approached by a steep staircase-ladder, will confront the big blocks of shops and warehouses likely to be built upon the opposite and entirely new side. To look at the matter in another light,—in the practical light in which the Board looks at such things,—it cannot be denied that the creation of a broad thoroughfare in front of a line of old tumble-down tenements of comparatively small value, is to virtually present a large sum of money to the owner or owners of the land upon which those tenements stand. The experience of Paris showed more than once the impossibility of making an owner pay the Municipality for having, unasked, tripled or quadrupled the value of his property; and were we certain, with the experience of the French capital before our eyes, that clever speculators, knowing beforehand the intentions of the Board, had bought at its original value the property on the untouched side of the proposed thoroughfares, we should be quite convinced that the worn-out houses would be pulled down and others erected in their stead. But that is not likely to happen, at least not twice, amidst the publicity which is enjoyed in this country. In fine, looking at it in the most favourable manner, a gratuitous donation to the owners of such dilapidated property as that in Crown-street and King-street is certainly not a business-like proceeding on the part of a practical body of men like the Metropolitan Board of Works.

We have devoted, for a number of years, considerable attention to the subject of the principal improvements now before a Parliamentary Committee. We have lately visited the proposed lines of route comprised in the triangle formed by Regent-circus, Holborn, and Trafalgar-square, and we have been amazed at the apparent increase of filth, squalor, and ill-fame with which the neighbourhood is polluted. To several communications addressed to us about the streets in question, we have been compelled to refuse insertion from sheer want of space; although we are convinced that ignorance alone of the proposed alterations prevents many, who would otherwise speak, from urging upon Parliament, through the newspapers, the necessity of a little more thought before beginning the work of demolishment. Surely the authorities of the National Gallery should bestir themselves to obtain for their building a means of that isolation which to a public repository of the kind is absolutely essential. Are there not also, in the immediate vicinity, certain places of concentration, such as Covent-garden-market, the western approaches to which require enlargement and addition? A broad highway, like the Haymarket, now redeemed to a great extent from its originally offensive character, requires only a slight impetus to become a useful and fashionable part of the metropolis. The new garden in Leicester-square is really an ornamental acquisition, and an opening on the southern side would improve the square and its surroundings. To Regent-circus, already crowded with vehicles, the new streets will bring no relief; on the contrary, two new thoroughfares from north and south will increase the confusion which now reigns within it. A large open *Place* is as feasible as it is necessary at the junction of the six, we may even say seven, streets, which are to disgorge their traffic in front of the "Criterion." That building, too, is an example to adjacent owners if inducement be offered them to improve their property, for it is one of the few good things of the kind in London, and its front towards Piccadilly is an excellent innovation upon the established dreariness of metropolitan architecture. We say, emphatically, instead of leaving, as the Board proposes, two petty and inconvenient building sites between Tichborne-street and Piccadilly, clear them away altogether; for the

* Now that street nomenclature is elevated, among a few ardent spirits, to the dignity of a hobby, it seems odd that this tautological barbarism is still maintained.

* See the *Builder*, 1861, p. 56; see also vol. for 1871, pp. 203-5.

† See p. 209.

whole should be made into an open and spacious centre, commanding, as it will do, highways leading directly to every part of the town.

The Strand and Coventry-street communication, as it is now proposed by the Board, will be straight (except on the north side of Chandos-street) from its Strand entrance at King William-street as far as the baths and washhouses in Orange-street. Then it is to ascend the hill of Princes-street with amazing crookedness. We would prefer after recent reconsideration to continue the new street in a straight line to the Haymarket, entering the latter at its present junction with Panton-street. This would permit a gradual rise from Orange-street to the Haymarket, instead of the rapid ascent to Coventry-street which the proposal of the Board involves. The Piccadilly entrance to the Haymarket could be easily facilitated by rounding off the corner block of houses on its western side, and the improvement of its eastern corner is contemplated by the Bill. Such a street connecting in a straight line the Strand with the top of the Haymarket would form a noble thoroughfare; and one which those who planned King William-street evidently had in their mind's eye. Again at right angles with the aforesaid straight thoroughfare we would connect Leicester-square with Trafalgar-square. We would construct a straight street along the flank of the baths and washhouses before mentioned, cut through the present barracks, and descend by the western side of the National Gallery to exactly opposite the portico of the College of Physicians.

The Trafalgar-square and Tottenham Court-road communication is to pass in a somewhat sharp curve behind the National Gallery, and then proceed along Castle-street, which, however, is already at right angles with the other new street from the Strand to Regent-circus. This, as we have said before, leaves a triangular site which is neither desirable nor likely to be profitable. We see no reason why, if carriages are to go behind the National Gallery, they should not go just a little further; and so leave a right-angled site for new houses on the eastern side of the new street to the north. To reach that highway carriages from the Strand will not go as far as the National Gallery; but their direct route will be up Bedford-street, Garrick-street, and Newport-street towards the new circus to be formed a little to the west of Seven-dials. The lower part of the suggested street from Trafalgar-square to Tottenham Court-road will be used principally by carriages coming from Whitehall and Westminster; and, convinced of this, we think it desirable that a means of using both the eastern and the western sides of Trafalgar-square, and of passing upwards on either side of the National Gallery, should be provided. The possibility of such an evident and necessary improvement ought not to be overlooked in the haste to pass an incomplete Bill.

Seldom has this haste been rendered more apparent than in the profound satisfaction which the House of Commons evinced upon receiving Sir James Hogg's wise announcement that the portico of St. Martin's would be spared. Mr. Beresford Hope in a glow of satisfaction withdrew his opposition; Lord Elcho oracularly hinted that the House would never permit utilitarians to run riot with our public buildings; and the two chief Imperial authorities upon art being satisfied, Parliament was contented. But it seems to have escaped the general wisdom that the feasibility of a route from Trafalgar-square to Tottenham-court-road depends very much upon that portico. The new highway, even if it were 100 ft. wide, would be of doubtful benefit if throttled at its entrance; and there reduced to less than 25 ft.,—about the present width of the roadway between St. Martin's Church and the National Gallery. Taking therefore this fact into consideration,—besides the fact, which we repeat, that the lower part of the new street from Trafalgar-square northwards is not required for the Strand traffic, but almost entirely for that of Pall-mall and Westminster,—it should indubitably begin on the western side of the National Gallery, and proceed in almost a straight line through Leicester-square to the junction of the two new streets, descending respectively from Bloomsbury and Tottenham-court-road. We have tried this upon paper, and consulted the large Ordnance maps of the localities through which such a street would pass; and, we may add, should it be too late to alter the Board scheme, the construction of a thoroughfare on the other side of the National Gallery is the only means of relieving the gullet of St. Martin's of its inevitable load of stoppage,—unless indeed the trustees of our art treasures are prepared to pull down a part of their eastern wing and give up some of their land for the public benefit.

The evident determination of the Board not to trouble itself, until the property will be infinitely increased in value, with the widening of that part of Chandos-street which is included in the proposed route from the Strand to Regent-circus, is accompanied by a similar disinclination to know anything about what is going to be done in the immediate vicinity of its own projected alterations. We believe it is no secret that the agents of the Duke of Bedford at last intend to open out Bedford-court, by prolonging Henrietta-street to Bedfordbury. This last-named slum,—some of our correspondents have thought that it belonged to the duke,—is, we are credibly informed, only an off-shoot of the ducal estate,—a sort of burgh or bury which has clung parasitically to its walls; and reformers have now taken it in hand. Plans are prepared for the construction of artisans' dwellings on one side of Bedfordbury; and under that Act of Parliament which, as yet, has done literally nothing for the artisans it professed to befriend, the demolishment of several human dens is imminent. Now, since that is the case, we respectfully invite those concerned to examine their maps: to look at Adelaide-street, and then raise their eyes to the junction of Garrick-street and New-street. By a little negotiation it will be possible to construct a highway from the top of New-street, on the edge of the Bedford Estate, to Adelaide-street, and thus the increasing traffic from Covent-garden Market, finding two new outlets into an improved Bedfordbury, will pass in a direct line by Adelaide-street to the Strand and Charing-cross. If Bedfordbury and its horrible tenements are at last to fall, the direction of the new street can surely be so inclined as to facilitate the communication of Covent-garden with Charing-cross. Indeed, whether the Board, in its sad craving after curved lines, has been wise in altogether avoiding St. Martin's-lane is open to needful comment; for it is impossible that the crowded wynds and confused courts, which abound on both sides of the lane, can be permitted much longer to escape official condemnation.

The promised new streets will form some of the most important thoroughfares in the metropolis; and consummate flights of architecture will not suffice to correct a radical error in their shape or inclination. Though we have a great love for Hogarth's line of beauty, we do not appreciate the wisdom which goes out of its way to obtain it. We still believe in the truth of that proposition which declares two sides of a triangle to be greater than its base; and we therefore think that the nearest and simplest way from one point to another is in following a straight line. Of course, our argument in favour of straight thoroughfares merely refers to certain lengths of streets. It would be impossible to travel in a straight line from one end of town to another without making an infinity of awkward angles. These are what we would avoid, for we want not only straight streets, but as many right angles as possible. If, moreover, we confess this partiality,—weak no doubt according to the opinion of many excellent artists,—for straight lines and right angles in the prosaic distribution of an improved London, it is because, other things being equal, a square plot of land is a more useful and valuable building site than a triangular plot of equal area; and all the new streets proposed by the Board necessitate the formation of irregular and awkward bits of ground, upon which even Gothic ingenuity will be puzzled to contrive satisfactory buildings. This story, got by heart from constant repetition, is a very old one. When the Romans set to work after the destruction of their capital by the Gauls, "so little taste had they for order and beauty," says an historian who dedicated his book to Pope, "that the city when rebuilt was even less regular than in the time of Romulus; and though in Augustus's time, when Rome was become the capital of the world, the temples, palaces, and private houses were more magnificent than before, yet those decorations could not rectify the fault of the plan." Then war, famine, pest, and fire, effectually created the open spaces which the complicated machinery of modern communities can only partially obtain. If Nero fiddled while his capital was burning, it was a matter for rejoicing that Rome should be cleansed even by fire. If the Napoleonic system deprived the French of their political liberties, it rebuilt their principal cities. Wise men accept these contradictions and seek for remedies. To control the doings of metropolitan government is a part of the business, if not the duty, of an Imperial Parliament; and yet the Bill for making these three new streets has virtually passed the House of Commons, we really believe, without a member knowing anything about the details of the scheme. Unless a Bill is opposed, and vigorously opposed, the merits or demerits of the reform it is intended to effect do not and cannot appear. The press is not encouraged to notice them. Yet a radical alteration of a large part of the West End ought not to be made until the House of Commons has patiently considered the arguments for and against schemes of alteration. A select Parliamentary committee ought to take the evidence of professional men and others, not only on a particular scheme, but on the whole question of possible improvement. Such a committee, if it be properly composed, might then be enabled to recommend better and more suitable lines of communication than those suggested by the Board; and which the latter might be invited to adopt. There would be a little delay; but in this instance, after a reticence of sixteen years, the delay would consist, not in the loss of the session's work, but in the postponement, for another twelve months, of a project for piercing important thoroughfares in Central London—a project not yet scientifically matured, and certain of condemnation when it will cost too much to rectify an accomplished blunder.

"A POSSIBLE CAUSE OF DANGER."

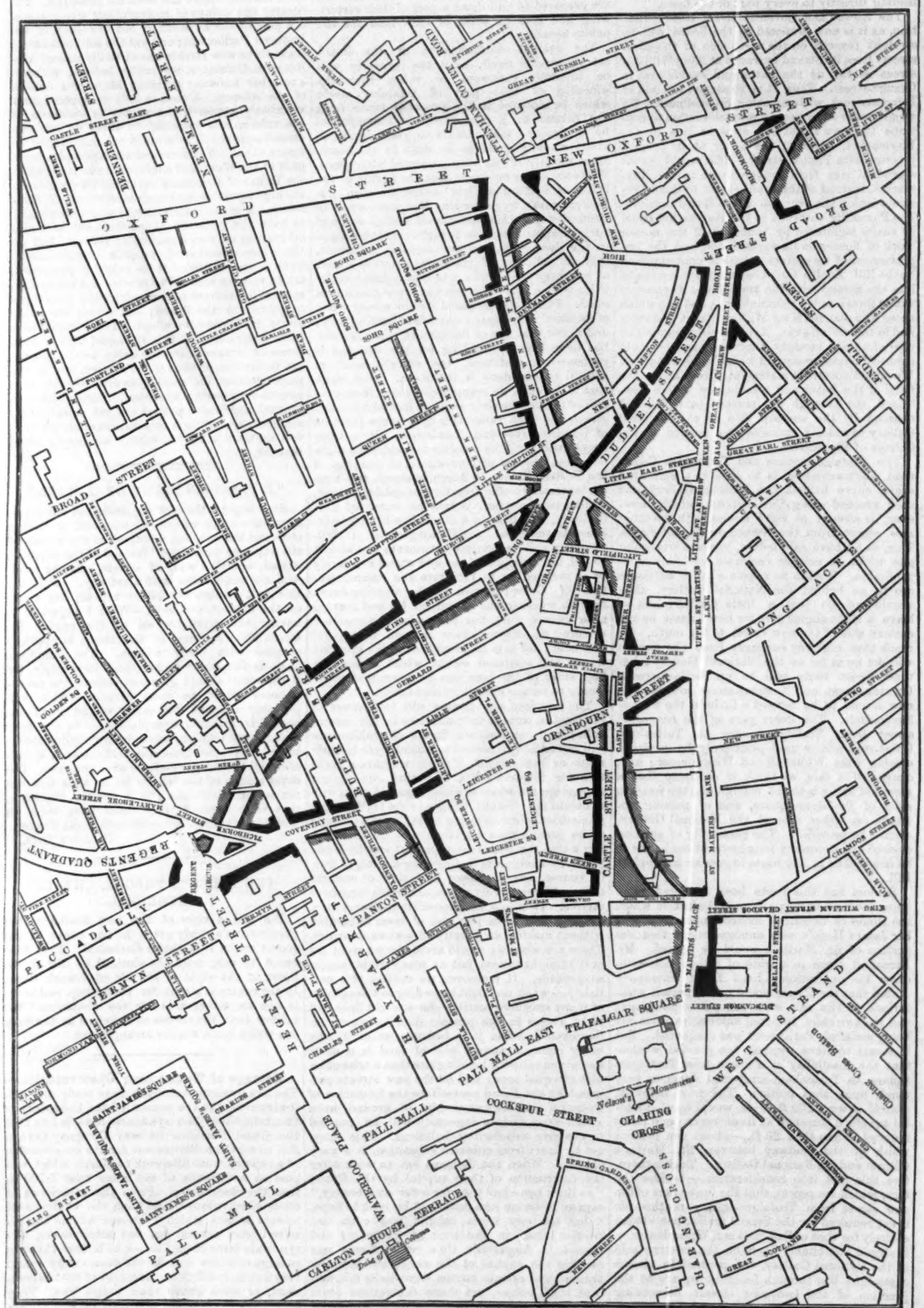
BY a slip of the pen we described our correspondent on this subject, in our last, as having observed the coupling disrupted of the wheels of the adjacent "carriage" instead of the adjacent *engine*, but this was, of course, obvious to all who are acquainted with a railway. Pointing this out, our correspondent repeats his views on the subject, and says,—What I object to is having the driving-wheel of the engine (to which all the force of the steam is applied) coupled with other wheels. The coupling-shaft is frequently broken, and fortunately, for if the wheel should give way instead, the consequences would be most serious. This will probably account for many of the numerous accidents hitherto unexplained. In the case under consideration, when both coupling-shafts were broken, the train was brought to a standstill, and the coupling-shafts were removed. The outer cranks of the wheels being thus free did not revolve in unison; it is obvious, therefore, that when coupled there must have been an intermittent strain attended with great danger.

CHARLES HILL.

THE BISHOP'S THRONE, CHESTER CATHEDRAL.

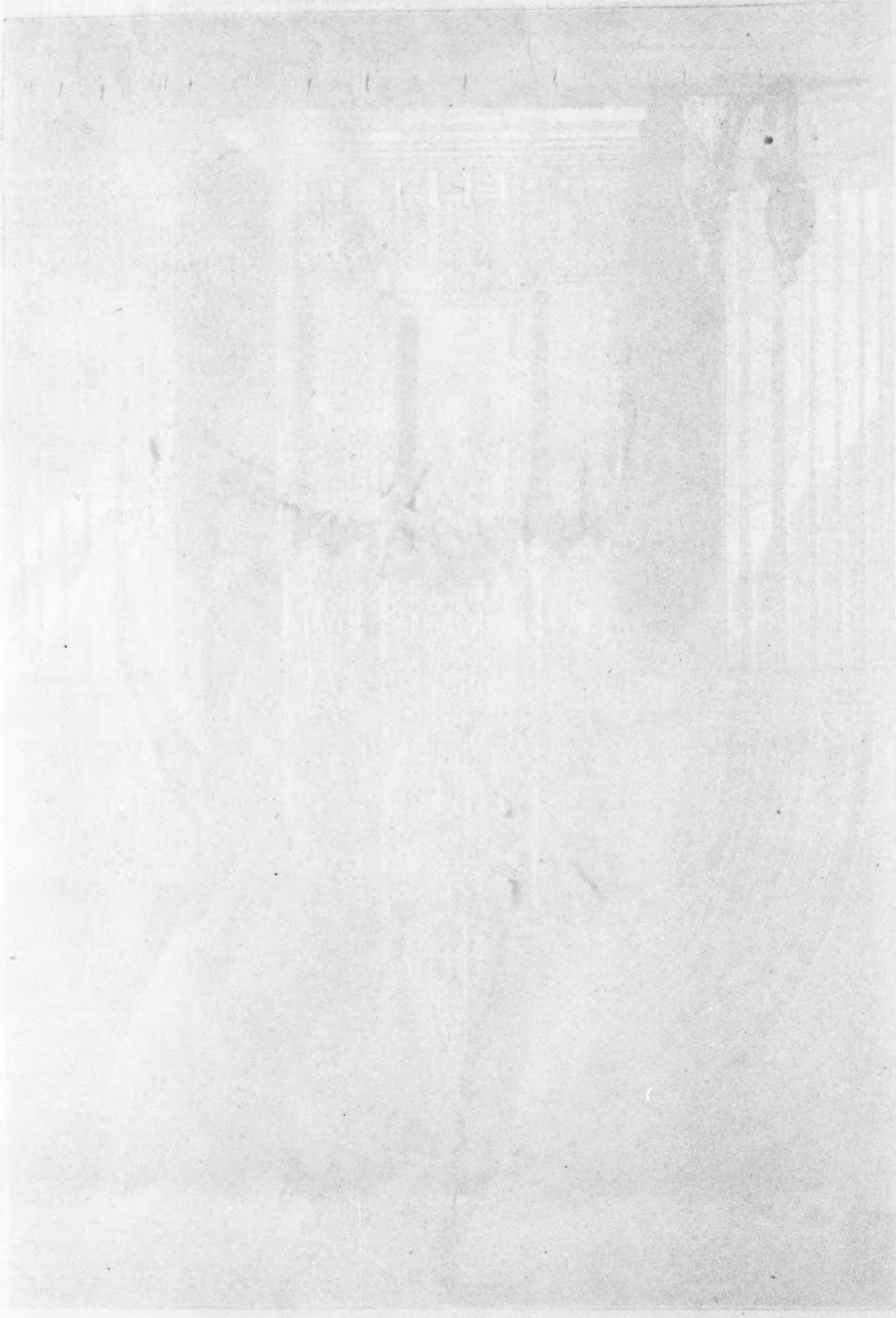
WE add a view of the new throne to the illustrations already given in our pages of the recent works in Chester Cathedral. It is executed in oak, from the designs of Sir G. G. Scott, in the style of the old stall-work there. In the centre is a seat for the bishop, and there is one on either side for the chaplains. We believe that the throne at Hereford is the only one which has a similar arrangement.

Passage of Trains near Observatories.—The observatory syndicate have made the following report to the senate of the University of Cambridge:—"The syndicate have learnt that the Great Northern Railway Company have a Bill now before Parliament for the construction of a railway from Shepreth to March, which will pass at a distance of not more than 1,700 ft. from the observatory. From the experience of other observatories, and from the evidence of private letters which Professor Adams has received from several eminent astronomers, the syndicate have strong reason to believe that the passage of trains so near the observatory would very seriously affect the accuracy of the observations, or even cause their entire loss. They learn that the tremors produced on the surface of mercury by an approaching train are often sensible when the train is at the distance of a mile from an observatory, and before the noise of the train can be heard. . . . . The syndicate, therefore, recommend that the University should petition Parliament against the passing of the Bill."



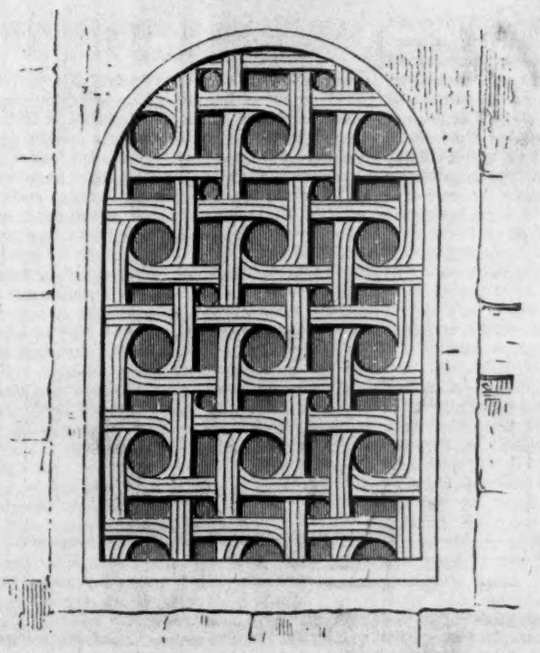
PLAN SHOWING NEW STREETS IN LONDON PROPOSED BY THE METROPOLITAN BOARD OF WORKS.

The Etched Parts show the New Line of Houses; the Black, the Old Line suffered to remain.



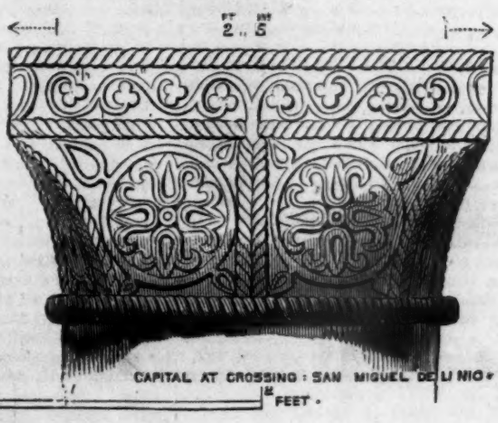
THE BISHOP'S THRONE, CHESTER CATHEDRAL.

St. Miguel de Linio.



· WINDOW IN PORCH · VALDEDIOS ·

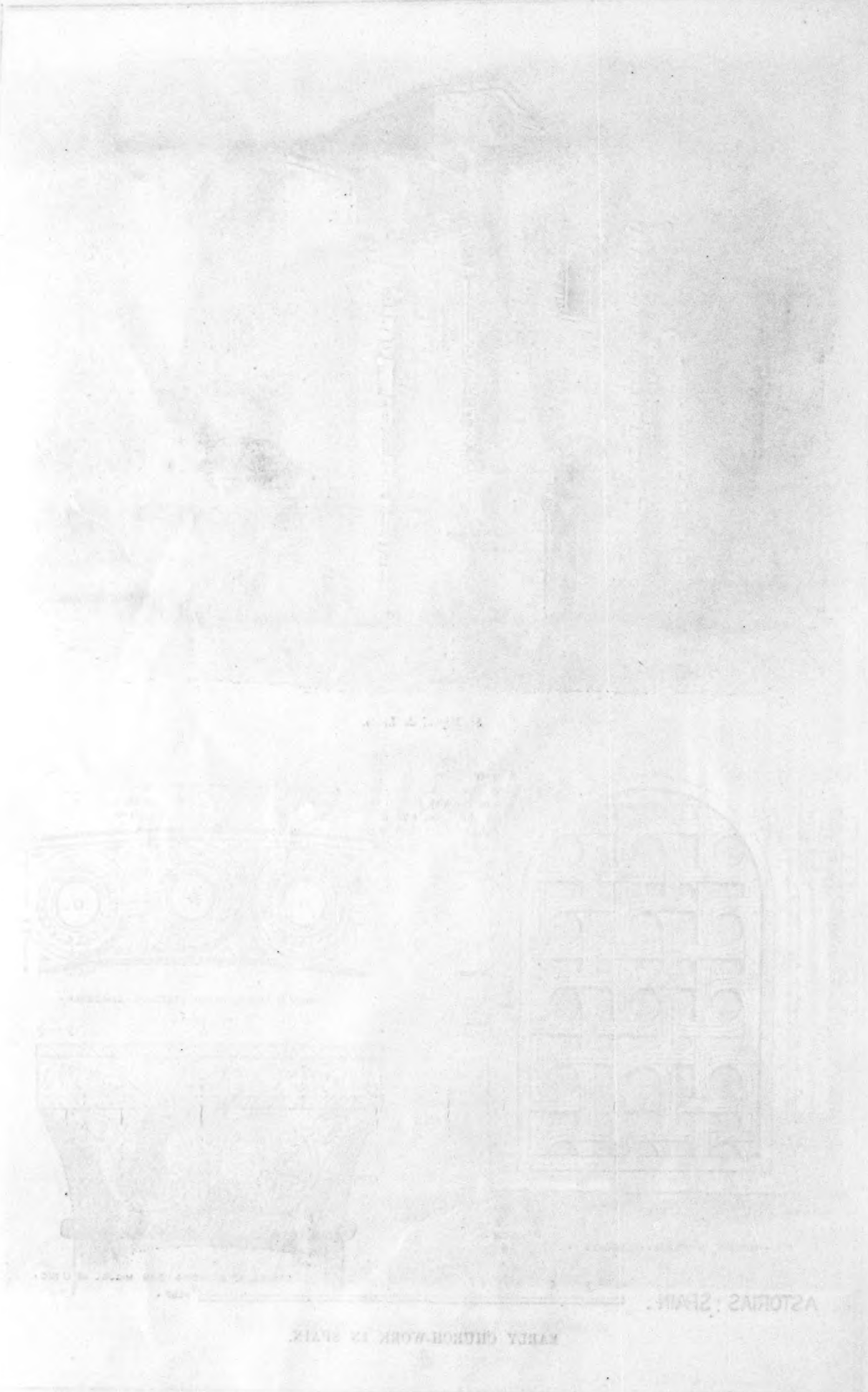
· PORTION OF ARCHIVOLT · TOMB · COLEGIATA · COVADONGA ·



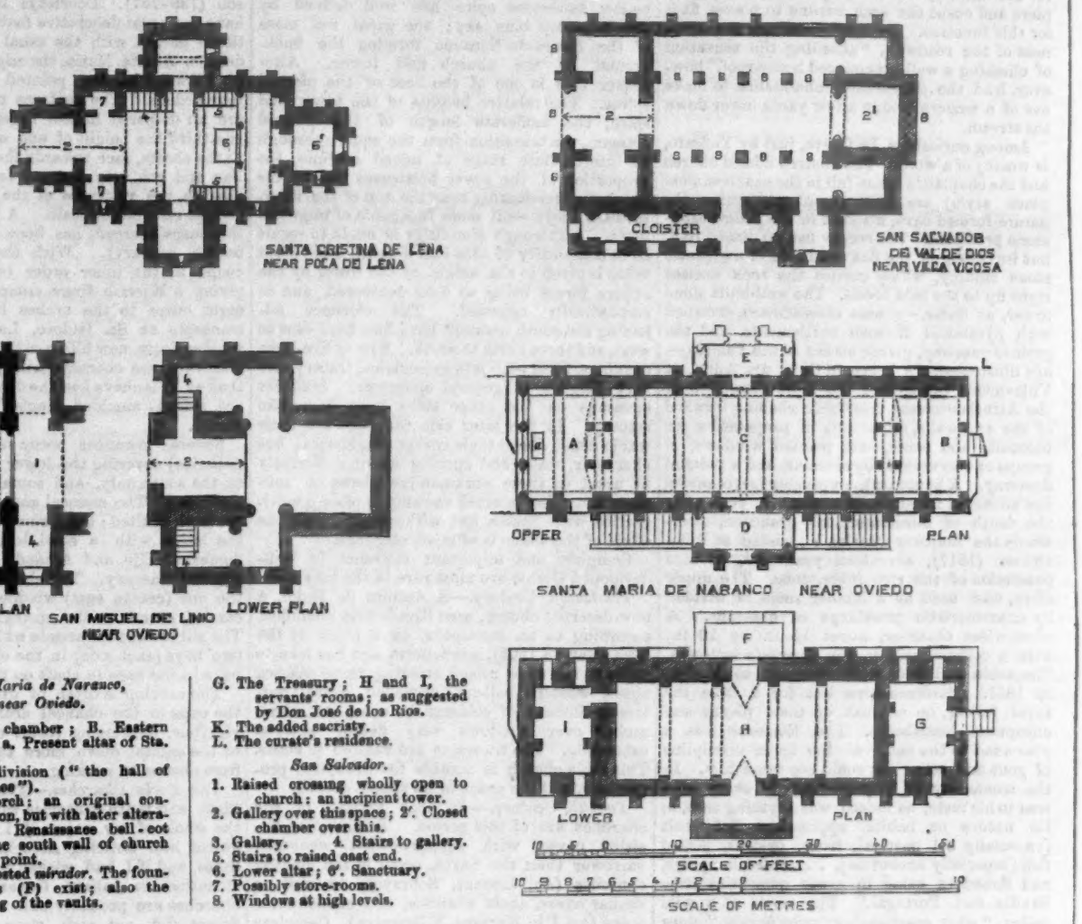
CAPITAL AT CROSSING : SAN MIGUEL DE LINIO ·

ASTORIAS : SPAIN.

EARLY CHURCH-WORK IN SPAIN.



EARLY CHURCH-WORK IN SPAIN.—*Plans.*



Sta. Maria de Naranco, near Oviedo.

A. Western chamber; B. Eastern ditto; a. Present altar of Sta. Maria.
C. Central division ("the hall of audience").
D. South porch: an original construction, but with later alterations. Renaissance bell-cot over the south wall of church at this point.
E. The suggested *mirador*. The foundations (F) exist; also the starting of the vaults.
G. The Treasury; H and I, the servants' rooms; as suggested by Don José de los Rios.
K. The added sacristy.
L. The curate's residence.

San Salvador.

1. Raised crossing wholly open to church: an incipient tower.
2. Gallery over this space; 2'. Closed chamber over this.
3. Gallery. 4. Stairs to gallery.
5. Stairs to raised east end.
6. Lower altar; 6'. Sanctuary.
7. Possibly store-rooms.
8. Windows at high levels.

EARLY CHURCHES IN THE ASTURIAS, SPAIN.*

When I obtained an offer to show the photographs exhibited on the present occasion, I was mindful of Sancho's principles, and "the heifer being offered, made haste with a halter." Probably few Spaniards, and fewer Englishmen, have taken such pains to know the Asturias as the two holiday travellers,† whose tours led them through the towns, villages, and hill districts, and afforded them leisure and plentiful subjects for photography. Not a few buildings appear in this probably unique collection. Some yet unpublished notes, by Mr. J. McAndrew, were put at my disposal, and I agreed to look up the subject, and bring some remarks into the form and within the limits of a paper.

The Asturias.—The heir-apparent to the throne has been Prince of The Asturias since 1388. This Wales of Spain is in round numbers 140 miles east to west by forty from north to south. A grand inner mountain barrier runs along the southern margin next Leon,—some elevations 10,000 feet above the sea level; one of them is—

> "Europe's summit, where the snows
> Through all revolving seasons hold their seat."

Lateral valleys and dips run from this great dorsal spine, and all the rivers reach the Bay of Biscay through the gaps in the outward range fringing the sea. This seclusion from the rest of the country has of course affected the history and the character of the people. Asturias was a refuge of aborigines, scarcely known before the time of Augustus, and brought into subjection by the Romans more in name than in reality. It again furnished strongholds to the unconquered when the Arab invasion had swept northwards over the peninsula, to and beyond the Pyrenees. This seclusion has been less complete since the "paved-with-silver" Camino real—the high road from Gijon by Oviedo to Leon and Madrid over the Pajares Pass (4,450 feet)—made transit safe for wheeled vehicles. Even now the railway from Leon carries only to the foot of the hills, and the pass must be crossed to Pola de Lena before the next section of the rail for Oviedo and Gijon is reached. Traffic, mines, and industries once in full work, will bring about rapid changes.

Scenery.—Cervantes did not omit to note the becoming pride of the natives in their country. Does not Doña Rodriguez take occasion to say to Don Quixote, "I am of Oviedo in Asturias. . . . . my husband was a personable man, and, what is more, as good a gentleman as a king, for he was of the mountains"? What Ford describes with unction as "the sweet interchange of hills and valleys, rivers, woods, and plains, now land, now sea," is the theme of much interesting description in the MSS. There are accounts, illustrated by the views, of the finest and most fertile part of Asturias,—the valley of the Pilona from Ynfiesto to Las Arriondas; and of the scenes of rich beauty, set in circles of distant hills, on the Sella, traced from Las Arriondas to the sea at Rivadesella. The Dobra, at its junction with the Sella, runs in a secluded, narrow valley,—filled with the rapid hill streams and rocks. On the Lena, bare limestone precipices frame in the lower ranges of sandstone hills, covered with masses of verdure. Rough limestone rocks appear beside the Ponga, with plenty of picturesque character; but wholly outdone by the weird heaps of jagged hills which hold among them La Peña Santa (nearly 9,000 ft. above the sea). Over Lake Enol hang rugged sterility and silence. All is water and mountain, scant trees and grass;—gloom over the deep clear waters even on the brightest day. Eagles and vultures inhabit these rugged recesses of the mountains, reached from the river valley at Cangas by ascent through and beyond Covadonga. The Caranga gorge (some twenty miles south-west of Oviedo) is also, no doubt, sufficiently impressive:—a narrow fissure in the rocks, just wide enough to allow the river to rush through,—the sides of immense height, their summits invisible from the dimly-lighted road scooped from the overhanging rock.

Generally.—Bad roads and none at all, crazy vehicles, the waywardness of mules and mule-drivers, insomnolence and its causes, borona, and ollas are all duly celebrated in the narratives,—with the proper admixture of market-days and festas, dances, methods of killing time, Paris fashions, lace veils, and mantillas. I have made due use of a very fine-meshed screen, and it may suffice to mention that limestones and sandstones for building purposes are found almost throughout the province, and much slate in the west. Marbles are plentiful,—white, pink, and green,—at Rengos, three leagues south-south-west of Cangas de Tineo.

Miscellaneous Buildings. — The ordinary modern buildings in the little towns have broad wall surfaces, projected balconies or recessed galleries, wooden-bracketed wide eaves, and flat-pitched tiled roofs. A good solid whitewash, plentifully bestowed on the general walling, gives emphasis to the quoins, jambs, and other cut stonework left to nature. In churches internally the pure white areas are contrasted with well-pronounced washes of yellow and blue; externally a greater simplicity of colouring prevails.

The picturesque barn peculiar to the province has detached wooden posts, with caps like grindstones, about 7 ft. from their tops to the ground. A rough stone wall is carried round outside all the posts, bracketed balustraded balconies on all sides, and a tiled roof over the barn and balconies.

The bridges, with pointed arches, pointed barrel-vaults of masonry, and great piers of level-bedded ashlar-work (such as those at Ynfiesto and Cangas de Onis), are Mediæval designs of much grandeur, entirely without decorative detail. With a spectator in the river that at Cangas frames for him the upper length of the valley of the Sella,—the Sierra del Andrin on the right, and the Pico Pierzo in the far distance. The great height of the centre arch above the

* By Mr. S. Flint Clarkson. Read at the Architectural Association, Feb. 23rd.

† Mr. J. C. Stenning and Mr. John McAndrew, two English merchants.

water-level (58 ft. from the top of the parapet to the water), and the ivy which festoons its piers and cusps the arch outline in p'aces, fit it for this function. Its narrowness and the steepness of the roadway, "affording the sensation of climbing a well-pronounced house-roof," however, lead the degenerate inhabitants to make use of a modern bridge a few yards lower down the stream.

Among curiosities, La Cueva, just by Ynfiesto, is worthy of a word. The modern domed church and the chaplain's house (all in the neat commonplace style) are built completely under the nature-formed cave, a recess in the yellow sandstone precipice. The recess has no domed roof, but its ceiling is the flat underside of a gigantic stone landing, which carries the rock masses right up to the field levels. The well-built stone tower, at Salas,—almost unwindowed, crowned with pyramidal Moorish battlements, and the groined gateway, giving access to the Palacio,—are illustrated. A house in Calle del Aqua, at Villaviciosa (altogether the most attractive of the Asturian towns), has bold corbelling forward of the end walls, apparently in preparation for balconies and pents,—six pointed windows, in groups of two divided by columns, and a pointed doorway. A house on the west side just opposite has attracted its share of notice. A year after the death of Ferdinand, his grandson, afterwards the Emperor Charles V., landed at Villaviciosa (1517), seventeen years old, to take possession of the rich inheritance. The upper story, now used as a lumber room, is divided by characteristic panellings of chestnut. A windowless chamber, about 15 ft. by 10 ft., with a coffered ceiling, was Charles's bedroom. The table and bed were removed to Madrid in 1861. Sardines here lost for a time the royal favour, on account of their plenty and cheapness hereabouts. The Emperor was a *gourmand* to the end,—all the fierce discipline of gout and other ills could not tame him. In the monastery of Yuste,—"fish of every kind was to his taste, as indeed was anything that, in its nature or habits, approached fish, eels [especially eel pasties], frogs, oysters, potted fish [especially anchovies]. . . . Soles, lampreys, and flounders came in great quantities from Seville and Portugal." The views of a wild valley, "with overhanging rocks abrupt," show the cave of Covadonga,—rising to some height in the precipice. Levelling approaches, building works,—centuries of pilgrimages,—have not destroyed the solitude which dwelt here in the early centuries. "Here we seem at the outskirts of the world." When the eye is allowed to range over the rocks from some distance down the valley the great works of Ventura Rodriguez, and the white walls of the Colegiata, most surely compel notice of the dark hollow of the cave, where Pelayo and his little band made their stout defence and successful sally.

1550 *to* 1300.—The church of S. Salvador had existed a good number of years, on the site of the present cathedral, before Alphonso II. made Oviedo his capital. He founded the see in 810, and made ready the Holy Chamber (Camara Santa), about 830, for the ark containing the relics brought from Toledo at the time of the conquest (712.) Thereafter the city was "Holy Oviedo." The rebuilding was commenced in 1301 with the chapter-house (east side of present cloister). In 1345 an impulse was given to the completion of the cloisters by a visit from Alphonso XI. The church was begun in the episcopate of Bishop Gutierrez de Toledo (1376—1389), continued through the fifteenth century, and brought to completion in the time of Cristobal de Rojas (1546—56). The spire was added in 1575. Since then the works of alteration and addition have not been considerable. [Here followed an account of the other features in this largest and finest church in the province.] . . . . The south tower is the open porch of the south aisle. It has a large turret at the south-east angle, and large double buttresses at the others. Traceried windows surmounted by ogee-crocketed and finialled labels occupy the three stages above the great lower arches, and a boldly projected gallery, with open-work parapet, terminates the tower proper. The next stage is somewhat smaller than that below the gallery. Each of the circular turrets at the angles has a spirelet. There are a couple of crocketed pinnacles on each side between the turrets. Another openwork parapet crowns this midway stage,—part tower, part spire,—and makes the transition easy to the open-work spire, octagonal on plan, crocketed at the angles, which reaches the total height of 269 ft. (English). From the south, the outlines and the not too elaborate piercings of the rich yellow sandstone spire are well defined by the intensely blue sky; the great red mass of the Sierra-de-Naranco forming the background to the church and tower. Altogether this is one of the best of the pierced spires. The relative heights of the tower and spire, the moderate length of the pierced octagon, the transition from the square through an intermediate stage of mixed outlines, the proportion of the tower buttresses and of the pinnacles terminating near the top of the intermediate stage,—all seem incapable of improvement. A thorough simplicity is made to result from complexity of idea and detail. The fullest value is given to the height of the tower by the square forms being so long continued, and so emphatically crowned. The cloisters adjoining the south transept have four bays east to west, and three north to south. Sets of five-light openings, filled with late geometrical tracery, are very English in general character. Six-light openings on the other sides have flame-like tracery. In the later side the caps are their whole depth above their earlier neighbours; but character, scale, and spacing match sufficiently as usual in these workmanlike pieces of self-assertion. The internal vaulting is plain quadripartite with bosses, but without ribs; and the effect of the whole is of much elegance.

Complete and important churches in well-developed Gothic are most rare in the province.

Thirteenth Century.—S. Antolin de Bedon, a now-deserted church, near Rivadesella (founded, according to an inscription on a pillar by the high altar, in 1205), is cruciform, and has lean-to aisles to the nave, raised crossing, three eastern apses, western bell-cot, corbelled eaves, buttresses instead of columns in apses, &c., semi-arches over windows very deeply splayed externally. The transepts are vaulted in stone. This little church is notable for grouping, proportions, and the grace of its simple details.

Twelfth Century.—A large number of the churches are of this period. Rectangular unaisled naves, with square-ended chancels, narrower than the naves, occur in the smaller churches (*e.g.* Lloraza, Sebrayo), as well as similar naves, short chancels, and semicircular apses (*e.g.* Ujo, Narzana, Villamayor). Complete triapsidal east ends are found in larger churches, with aisled naves and transepts (as Valdedios,—Vallis Dei, near Villaviciosa); on a very small scale with nave in a single span at Villanueva.

The south transept of Valdedios rises to form a short tower. Towers are rare. There are gabled bell-cots, with arches for single and for several bells on west walls (Villamayor, Sebrao, &c.).

At Amandi three divisions (on plan) are formed in the apse externally, by bonded shafts running the whole height. Smaller shafts, at the eastern angles of the square chancel, reply to three-quarter shafts on the curve. There are three spaces in the height: (1) the base course ranges with the bases of the shafts, and the window-sills,—formed of a combination of billets,—are continued as strings and as annulets to the shafts; (2) the square abacus above the carved caps of the shafts in the window-jambs, forms in its turn a string and annulets; (3) carved caps to the shafts and moulded corbels at intervals support a continuous stone eaves course. This is the usual apse of the twelfth century (also Villamayor, &c.). The fertility of design at the command of the designers would probably render it impossible to find instances of complete identity. General resemblance to examples named by Mr. Street from La Coruña (Galicia) eastwards shows prevalence in Northern Spain. In Southern France also,—in La Charente for instance,—numerous examples (Plassac, &c.) will be called to mind by all who have sat at the feet of Mr. Sharpe. Low-pitched gables, with stone barge courses, semi-cones over apses, all tiled; semi-arched windows, few, small, and high,—the abaci of jamb-shafts carried as strings; boldly-projected stone eaves courses on shaped corbels; (mostly) regular coursed masonry rather large in the stones:—this would describe most of the external features of a number of the small Asturian churches.

The south doorway at Villanueva is probably the finest of its century in the province. The design would be remarkable anywhere for its graceful vigour. It is of four orders with jamb shafts,—the caps in the west jamb *historiés*. The story on the capitals is explained as the parting, hunting, and death of Favila, the son of Pelayo,—a favourite subject (south door, Villamayor, &c.),—commemorated in this church with some appropriateness since the monastery was first founded by Alphonso the Catholic, Favila's son (739–757). Doorways in other churches have the usual decorative features of the Transitional period, with the usual endless variety of details. At Sta. Maria, the original parish church of Villaviciosa, the pointed west doorway has four orders. The surfaces of the jamb-shafts are all diapered in low relief. Figures, about one-third the height of and on the same stones as the shafts, face towards the centre,—a peculiar and not very elegant feature,—occurring also in the vestibule of the Camara Santa at Oviedo on a larger scale. A foiled inner order, the cusps pierced, has been substituted (thirteenth century). With the (8) blunt-edged cusps in the inner order (west door, Nava), giving a Moorish tinge, compare the fringes of eight cusps to the arches between nave and transepts at St. Isidoro, Leon. Many of the wooden doors, now filling in these twelfth-century doorways, are characteristic pieces of framing; that at Villanueva has the date 1700; the panels are raised-moulded, incised, and constantly varied.

Several instances occur of cloisters (lateral galleries) covering the lower walls,—sometimes on the south only, and sometimes on the south and west. The chancel and apse at Villamayor are both vaulted; the former with a barrel-vault, the latter with a semi-dome. Similar semi-domes at Ujo and Amandi are of horizontal-coursed masonry. The abacus of the shafts of the one (centre east) window, at Villamayor, is carried round at the springing of the vaults. The sill crowns the arcade which runs round,—in two bays (each side) in the chancel, and in four bays in the apse (a shaft on the axis).

The carving is often of great excellence, *e.g.*, the caps to the chancel arch at Villamayor,—vigorous, interlacing forms carrying the square of the capital down more than half the space from abacus to necking.

The Early Churches.—The churches of the ninth and tenth centuries would have occupied the whole of my paper, if I had not been beguiled into noticing Asturian buildings of all dates, and if I had wished to do more than call attention to salient features. These early churches are probably new to many; for Mr. Street did not visit them, and Villa Amil illustrates no Asturian buildings. I am told that the papers by the Rev. H. T. Tozer* are the most detailed accounts published recently in English, of personal studies of them.

The work† being published by the Spanish Government Commission contains pretty complete engraved illustrations. Parcerisa has lithographs. There are remains at Covadonga and at Pravia; two churches (Priesca and Valdedios) stand between Cangas de Onis the early capital, and Oviedo the later. Three buildings are close to Oviedo; and Sta. Cristina de Lena is on the road from Oviedo to Leon, whither Ordoño II. moved his court in 913. San Miguel is not used, and Valdedios only forms a portion of the enclosure of the monastery grounds. The rest are in use.

It has been the custom to call these buildings "works of the Goths,"—an awkward nomenclature for us with whom the nickname (Gothic) is a title of honour for most of the work from the eleventh to the sixteenth century in all the countries west of the Gulf of Venice and of the eastern shore of the Baltic. "Estilo Latino-Bizantino" (Don José de los Rios) is perhaps likely to find more general acceptance, than "Asturian" or "Early Spanish" (Mr. Fergusson).

Santa Maria de Naranco,—since Parcerisa's discoveries and illustrations in 1856,—has dwelt in the imagination of ecclesiologists. It has been pointed to as evidence that "the Spaniards in the ninth century adapted a Pagan temple to Christian purposes,—a Roman tetrastyle [distyle in antis] amphiprostyle temple, if such terms can be applied to a Christian edifice; . . . as if the Romans had left no basilicas in the land, and as if the Goths had been unable to elaborate any kind of *ecclesia* in which they might assemble for worship." The building consists of an upper and a lower stage; a parallelogram on plan, 67 ft. by 20 ft. outside

* *Gentleman's Magazine*, July, 1865, page 128; August, 1865, page 155.

† Monumentos Arquitectonicos de España, commenced 1856, now at its forty-sixth part, consequently nearing the two-hundredth plate. The papier grand aigle, types specially made for the Royal Press, Madrid; these and 100 reals (say, 21s.) for four plates and four pages of text might excuse envy in some English illustrators of architecture.

the walls. The lower story is about 10 ft. to the crown of the semicircular vault; and the upper 15 ft. 6 in. to the springing and 22 ft. to the crown of the vault. Arcades of three semi-arches carried on clustered piers divide the upper story into three sections in the length; the end spaces each 12 ft. long, and the centre 39 ft. The east and west ends have open arcades,—three arches to each,—descending to the floor, now wholly built up at one end, and a sacristy built against the other. The doorway to the upper story, reached by flights of steps, is in the centre of one of the sides. These circumstances being known, it was not an unreasonable suggestion that "the altar was placed originally in one of the porticos and the worship probably external; the lateral entrance, however, leading to the belief that some of the communicants must have been accommodated in the interior." Considerable study has been devoted by Don José Amador de los Rios, a member of the commission for the publication of the "Monumentos Arquitectonicos" (on the churches near Oviedo of the second period,—Estilo Latino-Bizantino, pp. 17-36), to the history and details of these early buildings. He has at length published his conclusion that this pariah church was originally the palatium (completed 848) of Ramiro I., who died in it 1st February, 850. It is chronicled that Ramiro, the conqueror of the Normans and at Clavijo, constructed "Palatia et balnea, pulchra atque decora . . . quoque in spacio LX. passuum ab ecclesiâ" (San Miguel de Linio). The argument runs that whereas the church is standing close at hand, and the remains of contemporary buildings are otherwise absent, Sta. Maria may well be the palace itself. Arguments, dangerously circular if they stood alone, point out that Sta. Maria wants the distinctive characteristics of the churches of its own and earlier date; and that, whereas San Miguel obeys (albeit, not very exactly) the custom of orientation observed in the other buildings, Santa Maria has the façade to the east and the altar to the west. The consecration as a church would be fixed between 905 and 1065. At the latter date is terminated the chronicle which records that the palatium having been "*In ecclesiam postea versum Beatæ Dei Genetricis, Virgo Maria inibi adoratur.*" It is suggested that the Naranco Palatium was a kind of occasional residence, of less bulk than some *aula*. The chambers at the ends of the upper story would be for habitation; and the central saloon,—separated from the chambers by screens,—the hall of audience for receiving dignitaries and nobles, the court of the rising monarchy. The method of dealing with the five openings in each of the end chambers, in order to make royal habitation feasible, would permit further suggestions. There are no windows in the north wall. The central opening on the north, opposite the vestibule, might give access to a *mirador* (belvedere) from, which Ramiro in the last years of his life could overlook the growing city of Oviedo. The foundations, and the remains of the springings of the vaults under and over it, would give the mirador the same size as the poroh on the south side. The lower story is also divided into three portions; not as the upper story by open arcades, but by walls; the east part for treasures, the central for those engaged in the personal service of the prince, and the western might be "*une sorte de dépense.*" Some discrepant accounts in chronicles which can be reconciled by ingenious emendations or excisions, and the very ancient inscription now at the altar of the church, present of course no insuperable difficulties to a resolute mind, bent on establishing this ingenious, simple, and yet apparently perfectly novel theory.

The plans of the buildings that have been churches from their foundation are various. San Miguel de Linio, Ramiro's church near Oviedo (before A.D. 848), is a Greek cross, with (practically) equal arms. Santullano (S. Julian), near Oviedo, is a cross with the western arm three times as long as the others. Sta. Cristina de Lena, near Pola de Lena, is an unaisled nave with transepts reached only by small archways, and a short chancel. Valdedios (A.D. 893) has nave and aisles; chancel and eastern chapels to the aisles; and no proper transepts. Priesca and Santullano have also aisled naves. There is an odd controversy as to an apsidal termination of the eastern arm of San Miguel. The evidence of foundations exposed a few years ago was loosely taken. There are combined in this church at least three other distinctive features found frequently later,—the cross form, the raised crossing (afterwards to be the cimborio), and the western choir gallery.

The sizes are not considerable. At Valdedios, for instance, the extreme dimensions are 53 ft. by 36 ft.; at San Miguel, 33 ft. 6 in. by 36 ft. The height of the nave of San Miguel is 26 ft. 6 in.; the total height of its lantern, 40 ft.; and from 2 ft. under the floor level its bulk is 31,300 cubic feet.*

Four, at least, of the churches have western galleries, a vaulted narthex under them,—not insertions, but integral portions of the structures. Without some number of specimens in the intermediate centuries, the mere recurrence to the custom of western choir galleries in the fourteenth century remains of course only a curious accident. Mr. Street describes ten western galleries (stone). The earliest, apparently of the middle of the fourteenth century; the larger number of the fifteenth century.

Crypts occur at Oviedo Cathedral (chapel of Sta. Leocadia) and Santa Cruz, at Cangas de Onis.

The approach to the Sanctuary, at Cristina de Lena is by seven steps upon each side.† The central space is occupied by a screen on the higher level, forming a reredos to the nave altar placed against the raised floor. The screen above the altar is a most distinctive piece of decorative carving. It is rectangular in five panels (really three stones, about 5 in. thick), the whole surface ornamented,—secured to the columns of the arcade which cuts across the church.

The windows are square-headed, circular, semicircular, and horse-shoe,—few and small, high up in the walls, and not prepared for glazing. In several instances these "ajimez" windows are filled in with slabs of marble (2½ in. to 4 in. thick), the surface much perforated, after the manner of Moorish traceries.

Some caps of columns and piers are carved with an early Romanesque foliage with stumpy leaves. At Sta. Cristina, and at Naranco, the caps have ropes arranged W.-wise, and figures in low relief in the spaces thus enclosed; the same feature occurs in a modified form in the cloister of Valdedios. The strings are frequently of a favourite rope decoration. The columns are plain at times; at others with plain ropes, twisted spirally over all their surfaces (sanctuary at Sta. Cristina). The architraves of some internal arches have foliage in low relief.

The figure sculpture in the arched recesses of the bases of San Miguel, and in the strange bas-reliefs (extreme relief about 1½ in.) on the single stones which flank the western doorway, is of an archaic type.

The general walling (walls 1 ft. 9 in. thick at Sta. Cristina) is usually in small irregularly bonded stones; the angles and buttresses with more perfectly squared stones. The nave of Valdedios, except the detached piers, is of brick (covered with plaster for painting); the mortar all extremely hard, and nearly as thick as the bricks. The arches of the sanctuary, coro (western gallery), and sub-coro at Valdedios (also some at San Miguel), are also of bricks. The main vaults (Valdedios and Naranco, for instance) are semi-circular, of *hormigon romano*;—concrete, with small and not too numerous stones, and burnt clay in considerable quantity reduced to small pieces. The original existence of wooden roofs does not appear to have been considered and cleared up.

The arts of the time of the Visigothic monarchy are, no doubt, obtaining careful investigation. Some decorative fragments, some walls (possibly), the treasure of Guarrazar in the Hôtel Cluny, and the crowns at Madrid, seem to be all the data at present. Parts of buildings may well have survived both the tooth of time, and the usual periodical clearances of consecrated sites for rebuilding. The buildings constructed by the immediate successors of Pelayo have not remained. In the absence of facts there is good reason to conjecture that the early buildings continued the traditions of the time before the Conquest, in a rader and poorer form. Between that time, 711–714, and the foundation of Sta. Maria, Covadonga, and St. Pedro, Villanueva, by Alphonso the Catholic (reigned 739 to 757), probably not more than thirty years elapsed. Fresh buildings were erected from time to time during the rest of the century and a half, interposed between the conquest and the works of Ramiro. A slow rate of change might be looked for after observing the small changes in detail in the fifty years between Ramiro's San Miguel and the Valdedios of Alphonso the Great.

It is, of course, impossible to adopt the language of chroniclers and Morales, and class these early works among the wonders and triumphs of our art. Separated also so widely from Spain, in many ways, our sympathy with the aims, now petrified in her history,—with the methods, and with the results,—must be very imperfect. There is counter-sympathy for those who were overthrown, and at the end mercilessly ground under the heel, in the attainment by the nation of its unity of territory and faith. Still, it is easy to understand how Spaniards may choose to cast back their thoughts to the days of eminence, to the long struggles through which the cherished ambition was gratified, and then to the small beginnings of this empire among the mountains; and it is impossible not to respect the affectionate interest of their antiquaries in the small temples of the infant monarchy,—the early churches of the Asturias.

* An idea of the size may be conveyed by the fact that at 9d. per cubic foot it would be valued at 1,170l.

† At Coire Cathedral (between Ragatz and Ems on the Rhine) the sanctuary is elevated twelve steps above the nave by staircases placed similarly north and south of the nave. There is a crypt under the choir and sanctuary a few steps down from the nave. See Street's "Italy," p. 36.

"FARNHAM AND ITS FAILINGS."

Of course we have had several correspondents for and against the views of our correspondent, "Gargoyle," including "One of the Local Board"; but the objectors simply give assertion against assertion. The *Surrey and Hants News* devotes a leading article to the subject, and with candour admits a certain amount of truth in the strictures. We willingly reprint the last portion of the article, and express a hope that the editor of the paper will lend his aid to bring about improvements:—

"We must agree with our writer to a certain extent in the matter of buildings, as, in the case of some houses which may be fit for human beings to live in, we are only surprised to find them inhabited at all. He evinces a charitable spirit towards the architects of the town, and because, in his opinion, there is no architecture in the town, he comes to the conclusion that they have had nothing to do with 'what little building there has been in modern times.' This sounds rather like an advertisement for all of them, and no doubt he would congratulate amateurs on what buildings we have, unless he thinks they 'growed' like Topsy in 'Uncle Tom's Cabin.' We rather think our writer is a little mistaken in saying 'land is cheap,' and if he should ever muster up enough courage to attempt to purchase a building site in Farnham he will be inclined to retract this statement. He hints at a delicate subject to close with, which perhaps he thinks best not to elaborate on. 'There is a Local Board, which can point with pride to what they have left undone, and so saved the pockets of the ratepayers who elected them.' While some persons may admire the policy that it is alleged our Board possesses, and in fact act up to it, we think it no policy at all; but perhaps, after all, it is better that some should try to act in this way to serve as a check on others who possess a stronger natural desire to spend money; and while we wonder what the consequences would be were the members of our Local Board all of one stamp in this respect, we feel bound to congratulate ourselves on having a mixture which is successful to a degree to produce the 'happy medium.'"

A YARMOUTH ARCHÆOLOGIST.

THE people of Yarmouth owe much to Mr. Chas. John Palmer, and they know it, and so they have presented him with a testimonial. The presentation took place on the 5th ult., and the testimonial consisted of a handsome silver flower-basket, a gold watch, and a purse of guineas.

The Mayor officiated, and the intellect of Yarmouth assisted.

Mr. S. Tucker, *Rouge Croix*, had acted as hon. secretary, and gave a pleasant account of his stewardship. The subscription of each individual was limited to a guinea. The number of subscribers was 235, and the amount received 233l. 9s. 6d. After paying for the silver flower-stand and the watch, and the incidental expenses of printing and so forth, there was a balance left at Messrs. Gurney's of 100 guineas, which, with the other presents, constituted the testimonial they had that day presented to Mr. Palmer.

Mr. Palmer, in the course of a very interesting address of thanks, showed how his antiquarian tastes had been originated by living in an ancient house in the town full of wood-carvings. He said:—As soon as his hand was old enough to hold a pencil he took drawings of the carvings, and went on drawing them until he got views of them in such a state of perfection that when Mr. Henry Shaw came down from London he undertook to engrave them, and Mr. Shaw had produced some of the most elaborate works that ever came from the press. He (Mr. Palmer) went to a day-school in Yarmouth, but he never had the advantage of a public school or of a University education.

He had referred to his liking for drawing, and the first master he had was J. S. Cotman, a man of remarkable genius, whose talents, however, were not appreciated then as they are now. A picture of his would sell now for double what his income was then. The second master he had was J. B. Crome, who was a man of considerable talent, but not possessed of the genius of his father, Old Crome. The style of these artists was very different: Cotman liked castles, ecclesiastical ruins, and such like; while Crome chose landscapes, trees, and so forth.

The incident is as creditable to the town of Yarmouth as to Mr. Palmer.

LINEAR PERSPECTIVE.

SIR,—In Thomas Malton's great work on Perspective, avowedly written on the principles of Dr. Brook Taylor, and now upwards of a century old, he enlarges upon a discrepancy to which I think too little allusion is made in perspective manuals. Speaking of some objectors to the strict results of the rules of perspective, he says:—

"They would have all objects represented in perspective exactly as they appeared to the eye. There is no such thing to be done; it is not in the power either of art or science to represent on a plane any single object (except a sphere or a regular plane figure having the eye opposite to its centre, and the picture parallel to it) as it appears; and yet perspective will give a true and just representation of every regular object. The cause of all their errors and false notions of perspective is their not rightly distinguishing between the representation of an object on a plane and the true appearance of it—two distinct things which can never be united on a plane surface or picture. The representation of any object on a plane is the section of the cone or pyramid of rays by a plane, and the appearance of an object is the section of the rays by the surface of a sphere only, to which every visual ray from the eye to the object must be perpendicular. . . . The true appearance can only be represented on a spherical surface, the eye being in its centre, but that is not a perspective representation."

Selecting a globe by way of simplest illustration, he points out that, although it is certain that globes appear round, let the eye be situated where it may, yet it is only in the single case above specified of the eye being opposite to the centre that they ought to be represented by a circular form upon the picture plane; and he asks,—"Can any person be so unreasonable as to expect that a representation of a solid object on a plane surface can appear truly to represent the original in any other point of view but in the vertex of the pyramid of the visual rays under which the object itself is supposed to be seen?"

Yet I imagine there are few, if any, artists, who, having to introduce spheres into their pictures (as ornaments, for example, on the tops of the piers of a balustrade), would not shrink, even instinctively, from representing any one of them except by that perfect circle which every sphere presents to the eye. True, if the observer never looked at the picture except from the station corresponding with "the vertex of the pyramid of the visual rays" of the artist, perspective deviations from the perfectly circular form would not be apparent, because (the different parts of the picture-plane being at various distances from the eye) the details of the picture itself are subject to perspective alterations of appearance. But as people do not, and often can not, look at a picture from precisely the right point of view, the eye would rebel on detecting the smallest deviation from a circular form for a globe; and the artist who disregards the strict requirements of perspective to the slight extent just indicated may plead this circumstance, and no other, in his defence. The actual difference thus disregarded by the painter of a picture is very small; but in published perspective diagrams the limited paper-space causes the station to be commonly chosen at an unnatural closeness to the objects, and there is thus produced, between what Malton calls their perspective and their true appearance, a divergence so great as to be manifest (particularly with curved objects) to every learner. It is therefore well that all instruction-books should state and discuss the subject.

S.

A Town-hall for Barrow.—The Barrow Town Council have given instructions to Messrs. Paley and Austin, architects, of Lancaster, to proceed with the plans for the proposed Town-hall. It is intended to adopt an elaborate design, but for the present only to build a portion of the grand block which is now required for municipal purposes, and to leave the main block till circumstances warrant its erection.

THE SALE OF SERJEANTS' INN AND HALL.

THE result of the sale of Serjeants' Inn and Serjeants' Inn Hall, Chancery-lane, which took place on Friday week, appears to have disappointed many persons interested in the value of land and buildings in the neighbourhood of Chancery-lane, who believed the property would have realised a much higher sum, considering the price which land in the immediate locality is said to have fetched recently. It is stated that some land in a less eligible situation in Chancery-lane, on which new buildings are in course of erection, was sold at the rate of 6*l.* per foot, whereas the Serjeants' Inn property, covering an area of 17,000 superficial feet, realised a little more than 57,000*l.* only, being at the rate of little more than 3*l.* per foot, although the buildings are of a substantial character. The general impression in the room at the time of the sale was that the property would fetch from 80,000*l.* to 100,000*l.*, and it transpired after the sale was over that Serjeant Cox, the purchaser, was prepared to have gone to 65,000*l.*, but there being no further competition against him after the last bid of 57,000*l.* odd on his behalf, he, of course, obtained the property for that sum. In addition to the three blocks comprising the Inn, and which contain about 100 offices and other apartments, the hall buildings occupy about one-fourth of the entire area, and were described as comprising the dining-hall, 38 ft. by 21 ft., with five richly-stained glass windows; also a large coffee-room; together with the chapel, 31 ft. by 20 ft., with three richly-stained glass windows; and the judges' robing-room, serjeants' robing-room, and domestic offices.

NORTHERN ARCHITECTURAL ASSOCIATION.

THE annual meeting of the Northern Architectural Association was held at the Old Castle, Newcastle-on-Tyne, on the 20th inst.,—Mr. Thomas Prosser in the chair.

The Hon. Secretary read the annual report, which stated that the number of members now amounts to forty-six, and the finances of the Association are in a satisfactory state.

Mr. T. Oliver, in announcing his resignation as hon. secretary, gave a short sketch of the history of the Association, which is about to enter on the twentieth year of its existence. He said: The Association originated in a felt want. There had previously been several local societies, all of which had collapsed; and it was with fear and trembling that the then senior members united themselves with us. Some who afterwards joined us pronounced a malediction at the time upon us, while others watched observantly to see our failure. Even Bonomi questioned our policy, Grainger seemed sceptical; but Dobson, who was always clear-headed, never wavered either in his confidence or in his allegiance. After passing through attacks both from without and from within, we settled down very gradually into what is equivalent to, and may be called, middle life. We had worked hard in our youth, and we were not disposed to undertake anything extraneous; but what we did undertake to do, we tried to do it well. We had formulated much that had been desultory, and in educating each other we refined ourselves. Our labours extended beyond the sphere of our local influence. We were asked for opinions and advice in regard to some of the international exhibitions, and in regard to the many questions that arose within the walls of the Royal Institute of British Architects. We gained a national position when we established an etiquette of conduct and fees. Our *esprit de corps* infused vigour into every existing society, and roused into existence several new ones, one of which was in phlegmatic Scotland. We suggested an architectural alliance, which has resulted in a bi-annual architectural conference, led now by the Royal Institute. Our funds have always been ample, and we subscribe more handsomely than any other association to the Architects' Benevolent Society. We are ready to advise and to help, and although we are a purely professional society, we are, nevertheless, glad to see visitors, and to receive instruction from those without the area of our constitution. The advancement of the art and science of architecture has not been altogether lost sight of. Nearly every member has had his taste cultivated by the healthful influence of our meetings, and some of their buildings now rank high as works of local art. The only fostering hand to help the struggling architectural artist has been found here, while the public has derived the advantages of this voluntary schooling. Inaugurated during an artistic revolution, we passed through the "Battle of the Styles," each taking our respective humble parts. The Classic of our fathers had to yield to the mighty influence of our national Gothic; whilst it, in its turn, has already yielded to that other phase of fashion, called Queen Anne, leading up, I suppose, to the more perfect development of the Renaissance. There is "fixity and pliancy" in art as there is in nature. Man changes, and generic man progresses. Our architecture must do the same to be living and truthful. During these years, with the exception of a single interregnum, when I stopped a gap by acting as your president, I have been honoured by your continuous confidence as secretary.

It was arranged that, in recognition of Mr. Oliver's services as hon. secretary, a testimonial should be presented to him.

The officers of the Association were then appointed as follows:—President, Mr. T. Oliver; vice-president, Mr. Gibson Kyle; hon. treasurer, Mr. M. Thompson; hon. secretary, Mr. W. H. Dunn; hon. solicitor, Mr. Hodge; committee, Messrs. F. Charlton, J. Johnstone, W. L. Newcombe, S. Oswald, J. Oswald, T. Prosser, T. Reay, W. J. Shotton, G. Connel, and J. H. Robinson.

Mr. W. H. Dunn read a paper on "The Relationship of Geology to Architecture," for which he received the thanks of the meeting.

Mr. Oliver laid before the meeting the claims upon its consideration of the Architects' Benevolent Society.

CONSTRUCTION OF THE LONDON THEATRES: SADLER'S WELLS.

WE understand that a consideration of recent events has led the Lord Chamberlain to carry out a more rigid supervision of the several metropolitan theatres than that which has hitherto been enforced with respect to the facilities for ingress and egress, and as regards several of these establishments we are informed that they will have to undergo structural alterations of an extensive character, whilst it is not improbable that others will be rebuilt. Amongst them is Old Sadler's Wells, which has been almost entirely reconstructed at a large outlay, and which it is said will be opened about Easter, with Mr. Phelps, who was for so many years connected with the establishment, as its leading tragedian. It was originally the intention of its present proprietors to convert it into a skating-rink, and with this view the interior was almost completely dismantled, the stage removed, and the space which it occupied, together with the pit area and that under the boxes, excavated to a considerable depth below the former level. The open space to the area of the stage, in the direction of St. John's-street-road, to the extent of 40 ft. in depth, was also enclosed for the purpose of enlarging the interior, admitting of a skating area of about 10,000 superficial feet.

The building has, however, been reconstructed as a theatre, with enlarged and improved internal arrangement, at a cost of about 12,000*l.* We learn that at the request of the Lord Chamberlain the proprietors are incurring a still further outlay in constructing additional entrances and improved means of exit, and that when these works are completed the theatre will be again licensed by the Lord Chamberlain, and opened for dramatic purposes. We are likewise informed that it is not improbable that the Grecian theatre in the City-road will shortly be rebuilt, whilst it is further understood that the owners of some of the West-end theatres will be called upon to comply with the Lord Chamberlain's wishes in providing improved facilities for ingress and egress.

Tower Subway Company.—On the 24th ult. the ordinary half-yearly general meeting of the shareholders of this company was held at the office, 26, Great George-street, Westminster, Mr. Peter Barlow, F.R.S., in the chair. The accounts showed that the expenditure on capital account to the 31st of December was 28,203*l.* 10*s.* 4*d.*, being an excess of expenditure over capital authorised of 1,603*l.* 10*s.* 4*d.* From the balance of the revenue account it was proposed to pay the dividend on the 7,830*l.* of five per cent. preference stock, after which there would remain a balance of profit of 494*l.* 8*s.* 1*d.* The adoption of the report was carried.

THE BURNING OF THEATRES.

THE following digest has been prepared by Mr. Nelson L. Derby, at the request of the committee on revision of the New York Building Act, appointed by the New York Chapter of the American Institute of Architects. It consists of a condensation of the chief facts contained in a treatise by Aug. Fölsch, of Vienna, on the general subject of theatre fires.

All experience has shown that in theatre fires, either the incipient flames are immediately extinguished, or the whole building is consumed. There is no half-way in the matter. At the Haymarket Theatre [Her Majesty's] in 1867 in London, seventeen steam fire-engines and as many hand-engines were unable even to restrict the flames of the burning building to itself alone. If such a fire once gains headway, from the presence of the vast amount of combustible matter about the stage, no fire-proof construction can long arrest it. The strongest masonry is destroyed, marble burns to quick-lime, cast iron is cracked and broken, wrought iron bends and gives way, and the building is as fully destroyed as if it were of wood. Statistics of fires show, further, that in no theatre fire has anything of value ever been rescued, so quickly do the flames spread.

Within the last century 130 theatres have been destroyed by fire. Some theatres, as Astley's Amphitheatre in London, have been burned three times. Of these 130 theatres, seventeen were burned in London, nineteen in Paris, and fewest of all in Italy, though in that country there are more theatres in proportion to the population than in any other part of the world. The mild climate of Italy requires little heating of theatres in winter, and spectacular pieces are uncommon. These reasons account for the fact stated. Between 1863 and 1869,—seven years,—forty-three theatres were burnt in different parts of the world.

Of all such fires, it is found that 52 per cent. take place between December 1 and April 1; 48 per cent. take place during the two hours after the close of a performance; 21 per cent. during a performance. This is occasioned by sparks from fireworks, &c., used in spectacular pieces, which fall unnoticed, and cause a fire to break out after the close of the performance. This shows the necessity of keeping a sufficient number of watchmen, especially during the night, in theatres, who shall be ready to extinguish the incipient flames. The necessity of a constant, even daily inspection of theatres, is proved by the burning of the Berlin Opera House in 1843. The reservoir could not be used because the machinist was at home with the key in his pocket. Such doors should never be locked. At the Dresden fire, the wire curtain was found rusted and immovable, and all the reservoirs empty. In the fire at the Käruthnerthor Theatre in Vienna, in 1761, many people were lost because the lower windows were covered by an iron grating. In the fire at Carlsruhe, in 1847, some of the stairways from the upper galleries were locked. This was done to save doorkeepers' wages. Not only were they locked, but nailed and battened fast, while their existence was unknown to many. This suggests the desirability of compelling managers to hang plans of their theatres on a large scale at various points in the building. These doors were broken in at last; and this, with the accidental presence of several oil lamps which burned after the gas was shut off, saved many hundred lives.

In a large theatre it is necessary to keep on hand scenery and decorations for three or four pieces at least. This, with the vast amount of cordage, bridges, traps, &c., found on every stage, points to the fact that the most important measure of all is to require all these inflammable substances to be soaked in or painted with some fireproofing solution. Most desirable also is a law requiring that all draperies and decorations in churches and ball-rooms, as well as in theatres, should be thus protected; also the costumes of actors, especially the gauzy coverings of ballet-dancers. It appears, however, that many fire-proofing solutions which have been tried have been found after a time to lose their efficacy, besides affecting the colours used in decoration. In Vienna, among other substances, borate of magnesia has been tried, and found to fail. After many attempts there, to-day no substance is in use. Mr. Boucicault, I see, recommends tungstate of molybdena; but there is no doubt that the matter should be placed in the hands of chemists, and thoroughly experimented upon.

In 41 per cent. of all theatre fires, the flames have reached and destroyed the adjacent buildings; in 36 per cent. of all cases these buildings have been attacked, but saved. This points to the absolute necessity of isolating theatre buildings on all sides.

The loss of the Dresden Theatre was caused by the use of benzine in painting. This substance should never be allowed to pass the door of a theatre.

To show that the Brooklyn fire was by no means the most destructive of life of all theatre fires, I quote from our author that at Saragossa, in 1788, 600 lives were lost; in Quebec, in 1846, 500 perished.

The author now goes on to describe the Vienna Opera-house, which in comfort, interior taste, excellence of ventilation, solidity, and ingenuity of arrangement, is second to none in the world except the new Paris Opera-house, and is fully equal to this in many respects. On each side of the stage are two 3-ft. walls 7 ft. apart. These are stiffened by vaults running their whole length, and forming passages nine in number upon each side. These walls support the iron stage roof under which is suspended an iron and brick ceiling. A wire curtain, weighing three tons and counterpoised, is suspended above the proscenium opening. It is let down every night, and is seldom raised during rehearsals. Its meshes are only three-fourths of an inch wide. It takes a quarter of an hour to raise it, but by loosening the windlass and applying a brake it can be lowered rapidly, though gently. The building is warmed by steam and well ventilated, while it is possible to shut off the gas from the stage and auditorium without extinguishing that upon the stairs and corridors. Two mains supply this theatre with water; one supplying exclusively the daily use, the other the fire service. Could we not, in view of the scarcely of water, connect pipes with the rivers, and fill our reservoirs with salt water for the latter purpose, with the aid of steam pumps?

Reservoirs in the Vienna Theatre are placed above the rear stage. In the inspector's room gauges indicate the height of water in the same, whilst other registers show the temperature of thirty different points in the building. Through speaking-tubes, telegraphs, pipes, &c., he has control of the temperature and the water and gas supply of all parts of the theatre. The reservoirs above mentioned feed pipes running through the vaulted passages already described, also across the stage-bridges, under the stage, and to the store-rooms. These pipes are above 10 in., below 5 in., in diameter. At frequent intervals are stop-cocks to which are attached flexible tubes with ¾-in. nozzles. In each passage by the side of the stage are small slits opening to the stage and closed by iron doors. Through these 150 openings half as many streams can be directed upon any portion of the scenery upon or above the stage. Ten men are employed to watch this theatre, and of these eight are on duty during the performance and four by night. They are controlled by six dial registers.

The author concludes with a few suggestions, among them that theatres should be connected with the nearest engine-house by telegraph; once a week all fire-extinguishing apparatus should be overhauled (this is a regulation in the Vienna Theatre); only Swedish matches should be used (also in force at Vienna); and the watching of all theatres should be placed in the hands of the city fire brigade.

DESTRUCTION OF HISTORICAL SITES IN CLERKENWELL.

In the line of the new street now in course of construction from the East to the West end of London, which is to pass through Clerkenwell, there are several sites which can only remain standing for a few weeks, in consequence of the requirements of the new thoroughfare necessitating their speedy removal. A writer in the *City Press* gives some interesting particulars. Commencing, he says, in St. John's-street, the new street (opposite Wilderness-row) will pass through the block of dilapidated buildings forming what is known as Pewter Platter-yard, of which there is a record that as early as the year 1690 an inn stood here which gave the name to the yard, and that "to the Pewter Platter came the Biggleswade carrier" (*vide* "The History of Clerkenwell," by Pinks and Wood, 1865, p. 307). The south side of Albemarle-street will pass away in the demolition. In this street resided, at No. 12, James Carr, the architect of the present parish church (St. James's); this house, however, will not as yet be doomed, as it stands on the north side of that street. Samuel Ware and Edmund Aitkin, once well known as architectural writers, passed their youth in this street. Ware was the author of "Tracts on Vaults and Bridges," and a work on "Arches and Abutment Piers" (now very scarce); and Aitkin is known as the author of "Designs for Villas and other Rural Buildings" (1808), "Essay on the Doric Order of Architecture" (1810), and "Plans, Elevations, Section, and View of the Cathedral Church of St. Paul, London" (1813). . . . . Continuing our journey of doomed houses, we come to No. 1, Red Lion-street, where once dwelt Mr. Mendham, wine and spirit merchant, to whom was apprenticed a Mr. John Britton for a term of six years, who toiled for five years and six months, until broken down by ill-health. His uncle, for such was his master, cancelled his indentures, and handsomely presented him with two guineas to fight the world with. Having a turn for literary pursuits, he commenced a careful study of antiquities, especially architectural, and after many years of toil, produced the well-known work, in conjunction with his friend Brayley, "The Beauties of England and Wales," in 26 vols., and alone he was the author of "Illustrations of the Public Buildings of London," "Pictures of London," "History and Antiquities of the Tower of London," "Architectural Antiquities of Great Britain," "Carter's Ancient Architecture, with Notes," (which are very valuable), "Beauties of Wiltshire," "Brief Memoir of Sir John Soane," "Union of Architecture and Sculpture," "Dictionary of Architecture," "Cathedral Antiquities," "Beauties of England and Wales," "Historical and Descriptive Account of Cathedrals," and other works. This house was called Jerusalem Tavern, but originally the Red Lion, derived from the Red Lion of Scotland. Latterly, within the past twenty years, it was used for the private wine and spirit business of Mr. Mendham. After his decease it was again converted into a public-house known by the name of Jerusalem Tavern. Rose-alley, Bitt-alley, Frying-pan-alley, and Lamb and Flag-court, will also pass away.*

NEW MUNICIPAL BUILDINGS AT KIDDERMINSTER.

THE new municipal buildings in Vicar-street, Kidderminster, have been formally opened. The buildings have been erected with a view to provide more convenient accommodation for the magisterial business of the borough and county, and for the borough police; and at the same time to concentrate the offices of the borough officials. The purchase by the corporation of the borough of the Assembly-room and Corn Exchange (until now known as the Music Hall) presented a favourable opportunity for erecting suitable buildings on a portion of the property, and thus acquiring the complete accommodation for a town-hall under municipal management. The new buildings (comprising the municipal offices proper), having a confined frontage to Vicar-street, convey a very inadequate idea of the amount of accommodation provided at the rear, the desirability of presenting a façade harmonising somewhat with that of the old Music Hall, coupled with the necessity of preserving the light to the Assembly-room, having influenced the general plan. The principal entrance is through a vestibule, with sliding ornamental iron gates, from which there are two doorways, the one being designed for the use of the central municipal offices, and the other for the use of the public frequenting the police-court and council-chamber; the former doorway opens at the foot of a well-lighted and spacious staircase, round which are grouped the offices for sanitary inspectors, borough rate-collector, and borough surveyor, the staircase leading to the town-clerk's offices and mayor's parlour, and, by a corridor, to the council-chamber and police-court, the latter of which has attached to it a magistrates' retiring-room and a witnesses' waiting-room; the other doorway from the vestibule leads by a direct passage to a secondary staircase, at the head of which are the doorways to the public galleries in the council-chamber and the police-court. A bridge corridor on the upper floor connects the new building with the old one, and in the latter are two large committee-rooms. The police-court and council-

* Of some of these frightful places minute accounts will be found in early volumes of the *Builder*.

chamber are warmed by Constantine's stoves; the retiring-room by Whiting's stove; and the cells by hot-water pipes; all other rooms having open fireplaces.

The buildings were erected by Messrs. Binnian & Sons, builders, of Kidderminster. The fittings in the police-court and council-chamber were supplied by Mr. Stringer; those in the town clerk's offices, sanitary offices, and police-rooms and cells, by Messrs. Downton & Sons; those in the borough surveyor's and magistrates' retiring-room, and witnesses' room, by Mr. Field.

The whole was carried out under the superintendence and from the designs of the architect, Mr. J. T. Meredith, of Kidderminster.

THE FUTURE OF THE OLD QUEEN'S BENCH PRISON.

WE understand there is a strong probability of the historical and grimy old Queen's Bench Prison being shortly numbered amongst the things that were, which is not to be regretted, for, not taking into consideration the fact that it has for several years past been practically useless, a more hideous or unsightly structure does not exist in this vast metropolis, whilst its having for so long a time been allowed to remain after its proper work was done has prevented much needed improvements from being carried out in the locality. Since it was closed as a debtors' prison it has been used for several purposes in turn, which have from time to time been abandoned, and latterly it has simply stood to be looked at and condemned. When all its incarcerated tenants were set free by Act of Parliament, it became a military depôt and a military prison in succession, but events caused it to be disused for that purpose, and it was subsequently turned into a kind of auxiliary convict penitentiary in connexion with Millbank, but for some cause or other its use for that purpose was not long protracted, and during the last eighteen months or two years its solitary occupants appear to have been a few warders from Millbank, who only enter its walls after the labours of the day are over. Under these circumstances it is satisfactory to hear a rumour to the effect that the Government are not indisposed to surrender the few remaining years of their lease which have yet to run,—it is said about five years,—and allow the site to be applied to some more useful purpose. In case of the lease coming to an end it is understood that the site would fall into the hands of the Corporation, and that in that event they will be prepared to negotiate for its transfer to those interested in erecting tenement blocks for the industrial classes, several of which have recently been erected in the immediate locality. Its demolition would also admit of opening out improved thoroughfares between Southwark Bridge-road and the Borough. The prison occupies an area of something like two or three acres in extent, and we believe that a short time ago an offer was made for it by the Midland and London, Chatham, and Dover Railway Companies, but rejected.

ENCAUSTIC PAINTING.

SIR,—The *Builder* of the 17th ult. contains some remarks on the use of the ancient system of encaustic painting, by M. Cros. The method of encaustic painting, as practised by the ancients, was investigated with considerable interest in the last century, both in this country and on the Continent. Pliny's description of the ancient method was critically examined, and sought to be explained, but never, I believe, with complete success, owing to the difficulty which exists of reconciling the word *inurere* with any process but that of enamel painting. Paintings on the walls of Pompeii and Herculaneum, representing artists at work, do, however, go far to establish the correctness of the process adopted by M. Cros.

Modern encaustic painting, or rather wax painting, has entered upon quite another phase. Chemical science has suggested other means of painting in wax than by heat, viz., by dissolving it in spirit, &c. Wax painting, therefore, no longer presents those intractable characteristics, which, as your correspondent justly observes, would confine its use to within very narrow limits. Some of the fine historical works of Schnorr, in the Residenz, at Munich, were painted in wax, and with the most complete success, and for the decorations of rooms of moderate dimensions it is, perhaps, preferable to fresco. The extended range of colour which wax painting permits, as compared with fresco, would doubtless render it more attractive than the latter to English eyes. It would, therefore, be well, as I have already suggested in the columns of the *Builder*, that painters who may have opportunities of testing any special forms of wax painting should make memoranda of their experiences, in order that the method may, if possible, be improved. The term "Encaustic," as applied to the modern system of wax painting, is, of course, all but a misnomer.

W. CAVE THOMAS.

COST OF DISPOSAL OF SEWAGE.

IN the 1876 volume of the *Builder* (pp. 1164-66) we gave the conclusions arrived at by Messrs. C. S. Read, M.P., and Robert Rawlinson, C.B. (who were appointed by the Local Government Board to inquire into the subject), as to the relative merits of the chief systems of sewage disposal now in operation. In an appendix to the report, the statistics of a number of towns are worked out in detail, with the purpose of showing what is the ultimate burden thrown upon the rateable property of the respective districts by the sewage and sewering processes there at work. The results are summarily tabulated below:—

1. By Irrigation and Scavenging:—

Towns.	Rateable Value.	Annual Cost in the Pound.
	£.	d.
Banbury	34,104	1
Bedford	66,000	1
Blackburn	235,127	11¼
Cheltenham	217,849	0½
Chorley (Lancashire)	54,407	7
Doncaster	68,721	3½
Harrogate	50,000	5½
Leamington	113,400	6½
Merthyr Tydfil	135,000	7½
Rugby	45,000	1¼
Tunbridge Wells	142,914	10
Warwick	43,339	6½
Wolverhampton	210,000	3½
West Derby	163,000	5½
Wrexham	32,000	0
2. By Chemicals and Scavenging:—		
Birmingham	1,229,844	10
Coventry	101,438	5½
Bolton-le-Moors	311,563	3½
Leeds	945,141	9½
Bradford	745,671	6
3. By the Pail System:—		
Halifax	242,581	4
Rochdale	222,000	8½
4. By Land Filtration:—		
Kendal	44,630	4

The range of proportionate burden in the first section is wide: from "nothing" against Wrexham to 11¼d. in the pound at Blackburn. In the second section the poundage varies between 3½d. and 10d. At Coventry the sewage is worked by a private company, and its disposal imposes no charge upon the town; the 5½d. in the pound is for scavenging alone.

THE METROPOLITAN WATER SUPPLY.

AT the meeting of the Metropolitan Board of Works on the 23rd ult., the Works and General Purposes Committee brought up a lengthy report with reference to the water supply of the metropolis, in pursuance of a resolution passed by the Board on the 2nd ult., referring to the Committee for consideration and report the whole subject of the water supply of the metropolis, especially as to the advisability of introducing a Bill into Parliament to authorise the Board to purchase the interests of the several water companies. The substance of the committee's report was that in their opinion the time had arrived when effect should be given to the report of the Royal Commission on water supply, so far as the same refers to the water supply of the metropolis being placed under the control of a responsible public body. They therefore recommended that the subject should be referred back to the committee, with instructions to prepare a Bill, empowering the Board to take under its control the water supply of the metropolis, with power to purchase the existing companies and extend existing works; and that the committee should be authorised to confer with her Majesty's Government, and to report the draft Bill to the Board.

Mr. Roche, the chairman of the committee, in moving the adoption of the report, pointed out that the question had been for many years under the consideration of the Board, and it had been reported upon from time to time. The Board had over and over again expressed its opinion, and considering the vital importance of a matte affecting the health of four millions of people, the question was deserving of most serious attention. He contended that so far as inquiry was concerned, the subject had been thoroughly exhausted, and what remained now was,—action! What the committee recommended was that effect should be given to the resolutions of the Royal Commission on the Water Supply. That Commission commenced its labours in 1866, but the report was not issued till 1869. The Commission distinctly advised that the water supply should be in the hands of the municipal authority. The question was, however,—what public authority in the metropolis should take the control of the water supply? After referring to the time that had been wasted in waiting for some great reorganisation of the government of the metropolis, and which, he said, seemed as utopian as ever it had been, he expressed a hope that the Metropolitan Board of Works would decide that so far as they were concerned they were prepared to carry out the recommendations of the Royal Commission if Her Majesty's Government were prepared to support the Board in their determination to do this. He believed he might state that the purchase of the water companies and the supply hereafter could be effected at a total cost less than the cost of the water supply at present; and as time went on there would be a considerable saving, whilst there would be more chance of obtaining a purer supply of water. In conclusion, he claimed these advantages if the Board could have the supply of water in their own hands,—(1) that there would be a purer supply; (2) a constant and copious supply; (3) a compulsory supply to the poorer districts; (4) greater facilities for supplying water for extinguishing fires, cleansing of streets, and flushing of sewers; and (5) that the water could be supplied at less than it cost now. It would be next year, however before that Bill could be introduced, as he need scarcely say there was a good deal to be done in preparing it.

After a long discussion, the recommendation of the committee was carried, on a division, by 26 to 9.

PREVENTION OF OVERFLOW.

SIR,—On May 13, and June 3, of last year, you were kind enough to insert letters of mine on a method of utilising the tide. In the former of these I incidentally mentioned the influence the scheme would have in preventing overflow if adopted in a tidal river. Such scheme would, no doubt, speedily refund the outlay, but the necessity for the purchase of a sufficient area adjoining the river would render the undertaking somewhat costly at first. Will you, therefore, kindly grant me space for making another suggestion, the requisites for carrying out which are only labour and material. By way of elucidating the subject, I will make two statements:—1. If we widen a river-bed, in order that during extraordinary seasons a greater quantity of water may be carried off, we render the river during ordinary weather more shallow; we diminish the mean head of water, and, consequently, the proper scour of the current, and during dry seasons cause an increased quantity of mud to be exposed to the view of the beholders. 2. If, on the contrary, we narrow the bed, so as to hide the mud, to improve the scour, and render the stream more rapid, we render overflow during a stress of weather all the more probable. Neither of these plans, therefore, is worthy of adoption. But in the scheme which I beg to submit to the notice of your readers, the advantages of these two methods are combined, whilst their disadvantages are completely eliminated.

It consists in an alteration, not of the width of the river-bed, but of its form, and may be described as a disposal of the bed into longitudinal terraces, as in a sloping garden. The principle may be adopted in the upper reaches of a river, as well as in its tidal portion. Let a central channel or trough be formed by wooden piles or otherwise, with a section-area equal to the present section-area of the river in the given part of its course, when at summer level, or (if in the tidal regions) when at mean low-water. Let the sides of this central channel be almost perpendicular, and its base almost flat, and flush with the lowest portion of the river-bed in that part. To effect this, dredging will be required. Let the resulting ballast be massed up behind the piles, and sufficient shingle be added, to form the first ledge or lower barge-walk on each side, receding by a slight gradient upwards and outwards from the

margin of the central channel, and limited externally by a second row of piles.

The height and width of the secondary channel thus formed must be such as to comprise, with the narrow central channel, a section area equal to that of the particular portion of the river when at mean spring-tide high-water mark, or when correspondingly full if above the tidal influence. From the summit of the second embankment, and extending to the present river-bank, let a level (or nearly level) area be preserved, bordered on the inner margin by an upper barge-walk or promenade, and bounded externally by a brick wall or other barrier for the prevention of damage to riverside property during extraordinary seasons. The intervening space can be devoted to the growth of plants which do not suffer from an occasional inundation, or to other purposes which may be deemed more fitting. Frequent steps should be provided leading over the wall, for the benefit of foot-passengers; and frequent inclines should lead from the upper to the lower barge-walk, for the convenience of barge-men and horses.

By the adoption of this scheme, the tide and the land water will be kept to a considerable extent distinct from each other. The latter, with its mud in suspension, will occupy the low-lying central trough, and the tide will roll up on the ledges at either side and on the surface of the land-water, with very little effect in stirring up the mud. The flow of the land-water will increase in rapidity, the scour of the river will be improved, the mud will very rarely make its appearance, and, unless there be a gross mismanagement of the various weirs and locks, floods will become a thing of the past.

D. B.

NOT GIVING NOTICE TO DISTRICT SURVEYOR.

WHAT IS A BUILDING?

A few days since, Mr. F. Mortimer appeared at the Hammersmith Police-court, before Mr. Bridge, charged with having done certain work at No. 151, King-street West, without giving notice to the district surveyor, Mr. Knightley. The work consisted of inclosing a building 40 ft. in length, 14 ft. in depth, and 8 ft. in height, with wooden boarding instead of with brickwork, as required by the Building Act. The defence was that the building had not been inclosed as alleged, but that some uprights had been fixed on the outside of an open shed, with a space between them and the posts supporting shed, into which boards were dropped, capable of being removed if required.

Mr. Knightley said he did not dispute this, but contended that the Act did not recognise any such mode of inclosure, it being calculated to spread fire.

The Magistrate doubted whether this was an inclosure, as it was said to be capable of removal, and also whether (in the absence of any definition in the Act) the shed was a "building" within the meaning of the Act; whereupon the district surveyor urged that Sec. 38 entitled him to a notice two days before the following act or event, *i.e.*, "Two days before any building, or any work to, in, or upon any building is commenced," &c. The defendant had admitted, and a witness also, that certain *work* had been done. As to the shed, if such was not to be considered a building to which the rules of the Act applied, then it would become the duty of the defendant to make an application to the Metropolitan Board of Works to sanction the construction; but he submitted that as this shed was inclosed, and used as a stable, which found no place amongst the exempted buildings in Sec. 6, it was, therefore, under the control of the Act. And further, that as a "building" was a "structure," as defined by the dictionaries, and if dilapidated would be dealt with under Sec. 69 as a dangerous structure, these circumstances were sufficient to define the present shed as a "structure" or "building." And the magistrate, after a patient hearing of the case, fined the defendant in a nominal penalty and costs of summons, for having executed without due notice the work above described.

DISPUTE AS TO THE CONSTRUCTION OF A DOCK.

WALKER *v.* LONDON AND NORTH-WESTERN RAILWAY COMPANY.

JUDGMENT has been given in this case by the Court of Appeal.

This was an appeal from the Common Pleas Division, under the following circumstances. In 1871 the Messrs. Walker, the plaintiffs, tendered for the construction of a dock, at Garston, near Liverpool, for the sum of 114,000*l.*, which was accepted by the railway company. By the terms of the contract the works were to be completed by August, 1873, and were to be executed to the satisfaction of the company's engineer, who had reserved to him the right to make any alterations he might deem fit during their progress, such extra work to be measured and paid for according to the contract prices. There was a stringent clause in the contract that if the contractors did not proceed with the work at the rate of progress required by the engineer, the contract was, at the option of the company, to be void, and there was to be a forfeiture of all the plant and stock, and all sums then remaining due on notice of the termination of contract being given. Early in June, 1871, the Messrs. Walker commenced operations, but they were not put in possession of the whole of the ground required down to January, 1874. In November, 1872, they wrote to the company asking, on account of the highly advanced price of materials and wages, which enhanced the price to them 50 per cent., and showed a deficit of 8,757*l.* either to take the works and plant off their hands at a valuation, or repay them their outlay, less 4,000*l.*, or to make such addition to the prices as would cover the actual loss. After some negotiations a new agreement was entered into, and between December, 1873, and January, 1874, the works were proceeded with. In the latter month the resident engineer sent a report to the head engineer of the company that the works were being proceeded with in a very unsatisfactory manner, but no communication to this effect was made to the contractors, and on the 22nd of January, 1874, the company sent them notice of the determination of the contract, and took possession of the works, plant, &c., and also claimed a forfeiture of all sums then found due. In February, 1874, the plaintiffs brought their action, and by consent a case was stated for the opinion of the Court of Common Pleas. The case, as stated by Mr. Manisty, Q.C. (now Mr. Justice Manisty) did not state that the engineer was, when notice was given to terminate the contract, dissatisfied with the progress of the works. Mr. Justice Brett and the late Mr. Justice Archibald gave judgment for the plaintiffs, and against this decision the company appealed.

The Lord Chief Justice, without calling on the learned counsel for the plaintiffs (the present respondents), delivered the unanimous judgment of the Court. He said the real question before the Court was, how they were to interpret the clause in the contract as to the forfeiture of stock and plant and all sums then remaining due. The counsel for the defendants had argued that was sufficiently met by an expression of dissatisfaction on the part of the engineer of the company, and no more. The contractors had, on the score of an immense increase in the price of all materials and wages, appealed to the liberality, if not to the mercy, of the company, and if they had said "We have nothing to do with that," it would have been thought a requirement within the stringent terms of the contract. But the Court could not hold that the requirement had been satisfied. The company might have put an end to the contract, but they had gone too far in taking possession of the works and all plant and material, and in claiming the forfeiture of all sums then due. The judgment of the Court below would, therefore, be affirmed, and the appeal dismissed with costs.

Judgment for plaintiffs accordingly.

BOARD AND LODGING MONEY.

ANDREWS, JARRETT, AND TREMAINE *v.* STRONG.

These were three several claims (heard in the Bloomsbury County Court on the 15th ult.) made against Messrs. Strong & Sons, carvers and art decorators, Riding House-lane, and as the facts were the same in each case, they were tried together.

It appeared from the evidence of the plaintiffs that they were cabinet-makers, in the employ of the defendants, and were sent to Ireland to put up some carved wood chimney-pieces for Sir Arthur Guinness, at Ashford House, County of Mayo. Andrews was foreman, and according to his statement they were to be paid according to the rate of the county. Had been in North Wales for the defendants, and was then allowed 14*s.* a week extra for board and lodging, in addition to the usual rate of wages, which for him was 10*d.* an hour, and expected to be paid the same in Ireland.

Jarrett and Tremaine gave similar evidence.

On the part of the defendants, William Strong the elder said the men were in his employ as joiners, not cabinet-makers. He expected a weekly account, but he did not get one, though his son wrote for it. Was only working for the trade. Paid his men 2*s.* a day extra when they went for a few days only, as they might have to stay at a public-house. The usage of the trade was to pay the men 3*s.* a week for lodgings.

W. Strong, jun., deposed that no terms were mentioned at the time, but understood the men would be paid 3*s.* a week for lodgings. They had the advantage of working overtime while away; instead of 54 they had 69 hours a week, and so put a good bit of money into their pockets, more than they could earn in London.

Frederick James Palmer, foreman to Messrs. Hearne, builders, and David Anderson, foreman of the joiners in the employ of Messrs. Johnson & Son, of Bond-street, stated that it was joiners' work, not cabinet-makers', which the plaintiffs had to do, and the ordinary trade allowances to the men when from home was 3*s.* a week.

The judge considered that this was not an ordinary case, and that the plaintiffs were entitled to the 14*s.* a week claimed.—Judgment for the plaintiffs, with costs.

DUTY OF ARCHITECT TO SUPERVISE WORKS.

PHILLIPS *v.* JENNER.

This was a case heard in the Lambeth County Court on the 13th ult., before Mr. J. Pitt Taylor, the judge. Mr. Wildey Wright appeared for the plaintiff, and Mr. H. Smith defended.

Mr. Wright said that the plaintiff was an architect and surveyor, and the defendant was a retired publican. In the month of August last, defendant wanted some alterations done to some houses in Wells-street, Camberwell. Defendant consulted the plaintiff, who surveyed the houses, and communicated with the builders, and got tenders for the work. A contract was signed by the defendant for certain work to be done for 289*l.* It was subsequently agreed that extra work should be done at 43*l.*, and other works at 3*l.* 10*s.* On the plaintiff's certificate the builder was paid. Everything went on well from August till December 2nd, no complaint having been made, when on that date the plaintiff received a letter from the defendant's solicitor, stating that the work was to be stopped. The claim of the plaintiff was for five per cent. commission on work done, which, with expenses for specifications, &c., amounted to 14*l.* 5*s.* 6*d.*

Plaintiff, in cross-examination, said that on November 2nd, plaintiff received a letter of complaint from the defendant, saying that some of the ceilings had been damaged by the rain. The contractor was to provide tarpaulin to prevent the rain getting through; this was only provided part of the time.

The judge pointed out that a surveyor was appointed to see that the builder carried out his work. It would certainly be a gross violation of duty on his part to give the builder a certificate for the payment of work that had not been done according to the contract.

Cross-examination continued.—The front wall of one of the houses did not, to his knowledge, bulge out. Was positive that the mortar was of the best quality. Was sure that there was 280*l.* worth of work done.

Mr. Everett, builder, said that he had done over 280*l.* worth of work to the houses.

For the defence, Mr. W. Colman was called. He said that he was an architect of forty years' standing. The work was quite unfinished, and was done so badly that the highest value he could put upon the work was 75*l.* Visited the houses on November 13 and December 5. On the first-named day it was raining hard, and the rain was coming through the roof plentifully. On the other day the wet was coming into the backrooms and running down the staircase. This was in consequence of the want of tarpaulins on the roof. The damage done by the want of tarpaulin could not be under 10*l.* or 15*l.* The plaster was of very inferior quality. As an architect he always held himself responsible for work being done. One of the walls was about three-quarters of an inch out of the perpendicular. The chimneys were very fairly done; but most of the work had been scamped.

The judge said that if he took a cab and went down and inspected the houses he would be the better able to form a judgment of the work done.

Mr. Wright said he had not the slightest objection to his Honour doing so; but the buildings had not been guarded since the work had been stopped, and the neighbouring children had been permitted to run in and about the buildings.

Mr. Smith agreed.

On the judge's return into court he said that he had had an opportunity of seeing the work which had been superintended by Mr. Phillips, and had come to the conclusion that he had not performed his duty in an efficient manner as an architect; consequently he had not earned his commission.

Judgment for defendant, with costs. Short order.

COMPENSATION CASE.

CHANDLESS *v.* SCHOOL BOARD FOR LONDON.

This was a case (heard in the Sheriff's Court, Red Lion-square, on the 16th ult.), to award compensation for some leasehold property, under the will of Mr. T. Chandless, Q.C., in Stafford-street, Marylebone, the site of which was required for a new school.

For Mr. Chandless it was stated that the property was held from Sir Edward Baker, on lease, of which about sixteen years were unexpired, at a rental of 29*l.* 8*s.*, and the houses in Stafford-street produced to Mr. Chandless, as trustee to his father, 49*l.* 4*s.*, showing a net profit of about 24*l.* The question was the valuation of the unexpired term, and he would show that the same was worth 240*l.*

Mr. C. Long, a surveyor, gave evidence that the interest to the claimant, under the will of his father, was worth 240*l.*

Mr. Rain said he was not prepared on the part of the School Board to rebut the evidence.

Mr. Under-Sheriff Burchell told the jury that if they were satisfied with the evidence they would find a verdict in accordance with the valuation given.

The jury immediately returned a verdict for 240*l.*

THE PRACTICE OF HIGHWAY BOARDS.

SIR,—Can any of your readers give me any information as to the mode usually adopted by the various Highway Boards in reference to doing the repairs of the highways, whether by contract or day-work? Some time ago the Frome Highway Board decided to let by contract the whole of the work, including quarrying, carting, breaking, spreading, scraping, &c.

The quantity of stones was of course to be measured after they were broken ready for spreading; but soon after the contracts were signed the Board decided that all stone should be stacked up "by the contractor" one yard high, before being broken, for the purpose of measurement (the stone here, before being broken, is in most irregular blocks), which of course the contractors readily agreed to, as it was putting 20 per cent. into their pockets.

As I consider this very hard on us ratepayers of Frome, I should be glad to know the course usually adopted by other District Boards.

X. Y. Z.

SOUTHERN EMBANKMENT OF THE THAMES.

SIR,—Some of your correspondents seem to be anxious to claim priority with reference to the scheme of a river-wall for the protection of the southern side of the Thames. Some time in February last year I forwarded you plans, &c., of a scheme which had been submitted by me to many parties early in the previous year, and which the inundations of the latter part of 1875 induced me to have printed for circulation.

This scheme is a definite one, and I believe it would cheaply as well as efficiently secure the end in view. You were kind enough to notice it at the time.

WM. WIGGINTON.

Fire at Auction-rooms in Manchester.—The auction-rooms of Mr. J. P. Mutteen, Mosside, Manchester, have been partially burned down. A picture by Salvator Rosa, valued at 1,000*l.*, was destroyed.

A NEW DOCK AT BRISTOL.

THE Mayor of Bristol opened the Avonmouth Dock on Saturday, the 24th ult. The inaugural ceremony was of a most successful character. Mr. P. W. J. Brunlees, C.E., is the chief engineer of the docks.

The new dock is situated at the mouth of the river Avon, a few miles from the city of Bristol. It has been nearly nine years in progress, the first sod having been cut in August, 1868, and the total cost of the dock, lock, warehouses, machinery, &c., is something like 600,000*l.*, or 200,000*l.* more than the original capital of the company. The basin of the dock contains a clear area of 16 acres, it being 1,400 ft. long and 500 ft. wide, and it has a depth of water at ordinary tides of 31 ft. 3 in., while a height of 26 ft. can always be maintained. The dock-gates are the highest in the world, having a depth of no less than 49 ft. Their width (70 ft.) has been exceeded. The lock is 600 ft. long, and 70 ft. wide, with a depth of water of over 40 ft. The hydraulic apparatus for opening and closing the gates, and supplying the six large cranes which surround the dock with motive power, was provided by the firm of Sir W. Armstrong & Company, of Newcastle.

TREATMENT OF TENDERERS.

THE complaint by the St. Pancras Ironwork Company, in your last issue, is, in my opinion, perfectly reasonable. In the first place, it is manifestly unfair to punctual tenderers that any tender delivered an unreasonable time after that stated in the instructions should be recognised in the same way as the others.

My rule, as an architect, in limited tendering (that is, where a fixed number of firms are selected, either by the architect or the proprietor, or both) is this:—In case any one firm of those invited to tender be absent at the time named for opening them, I announce the name, and leave it for those present to decide how many minutes shall be allowed. This avoids all cause of complaint. But should any tender arrive late, (that would be after the last tender is opened), I open it, and publish it with the list, taking care, however, to note that it arrived late. Should it happen to be the lowest, I should certainly advise my client that it would be unfair to the others to accept it.

I think late tenders should be always opened, because it must be very galling to a firm of builders, after having taken all the trouble to prepare the tender, to have it returned unopened, especially if it should be the fault of the clerk in delivering it, and not of the firm at all.

In the next place, the lowest tender in all limited competitions should, as a rule, be accepted, or a reasonable sum allowed to the firm for preparing it, unless any misgiving should arise as to that firm's stability and responsibility to carry out the tender, before it is actually accepted, in which case it is the duty of the architect to act cautiously and conscientiously for his client's sake; and for this reason I always, without exception, insert the clause, "The proprietor does not bind himself to accept the lowest or any tender."

The Vestry [of St. Pancras are not immaculate, and certainly not exceptional in the case quoted; but respectable and responsible firms ought not to be put to the expense of tendering when it is already settled beforehand whose tender is to be accepted, whether it be the lowest or the highest. There is a want of principle in it. Some definite custom should prevail among architects as to this question of tendering, and so prevent a great deal of unnecessary ill-feeling.

H. H. B.

The Inter-Oceanic Canal.—The Commissioners appointed by the President of the United States to examine the reports of the officers in charge of the surveys of the inter-oceanic canal routes across the Isthmus of Darien and contiguous territory, have pronounced the Darien route superior to all others, both for the construction and maintenance of a canal and its profitable use. The route thus approved of begins on the Atlantic side at Greytown, running by canal to the San Juan river, following it, by what is designated "slack water navigation," to Lake Nicaragua, and thence by canal to the Rio del Brito, on the Pacific coast. The cost of construction is estimated at upwards of 100,000,000 dols., and the time required to complete it is ten years.

CAMBERWELL WORKHOUSE COMPETITION.

A LESSON FOR COMPETITORS.

SIR,—I have seen in your paper reference to the above competition. From a perusal of the columns of the *South London Press* of February 10th, and from other local sources of information, I feel assured that this is a case for a little wholesome ventilation.

The most ordinary experience, and a comparison with other buildings of a similar nature (even after making full allowance on account of an existing building to be adapted for the reception of 100 children, but which will still require radical alterations), must show that the figure quoted by the selected competitor is inadequate for a building to accommodate between 400 and 500.

Another South London workhouse for 600, very simply built, and with otherwise very similar requirements, excepting that it has an out-door administration, cost, to my knowledge, 67,000*l.* from first to last; yet the sanguine author of this design, whose only supposed merit, so far as I can learn, is cheapness, proposes to erect his building complete for 26,000*l.*!

Of course, the guardians, honest men, are not supposed to know the value of bricks and mortar. They have also to study economy, and to meet their electors; and, consequently, are only too glad to pounce upon such an attractive scheme.

The lesson which, I think, competing architects may learn from this is plain, viz., that in such matters a sanguine temperament, which sees its way to doing things for half the usual amount, is of more value than all the talent in the world. A man has but to clap down 26,000*l.*, instead of 46,000*l.*, sign himself "Veritas," and the thing is done.

SURVEYOR.

IMPROVED FIRE-GRATES.

SIR,—In reply to what appeared in your paper on the subject of "Improved Fire-grates":—

The exact shape of the fire-basket, or trough, may have emanated from Mr. Leslie, but the principle of slow combustion, upon which these stoves are constructed (that is to say, having a solid fire-brick bottom), was used by the late Mr. Barnard forty years since.

We have always advocated the principle, and some five years since, when Mr. Jeckyll designed for us our ornamental fronts, we published these stoves, and have sold many thousands of them. We therefore think we can with justice claim "the merit of introducing the principle to the public."

BARNARD, BISHOP, & BARNARDS.

UNSTAMPED TENDERS.

EWERT v. WOOLRIDGE.

THIS was a claim (heard in the Bloomsbury County Court on the 22nd ult., before Mr. G. Lake Russell, judge) to recover the sum of 14*l.* 10*s.*

It appeared from the evidence that the plaintiff is a zinc manufacturer, No. 346, Euston-road, and the defendant a builder, at Beckenham, Kent. In the month of August, 1875, the defendant, who had been in the habit of employing the plaintiffs, wrote to them, asking for an estimate for fixing some gutters to two blocks of houses he was building at Beckenham, and Charles Salter, foreman to the plaintiffs, went down and saw the buildings, and gave the defendant a verbal estimate of 14*l.* 1*s.* An estimate was afterwards sent by the plaintiffs in writing. Two cisterns were to be lined with zinc, but which were not done, and the plaintiffs deducted from their account 1*l.* 10*s.* The zinc for that purpose, however, was sent down to Beckenham, and had been detained by the defendant, for which they charged 1*l.* 6*s.*, making the total amount of the claim 14*l.* 10*s.*

For the defendant it was submitted that the contract should be stamped.

The judge concurred, and nonsuited the plaintiffs without costs.

Coffee Taverns.—We willingly call attention to an enterprise which seems calculated to promote the public health as well as the public morals. At a meeting held recently at the house of Mr. Ernest Hart, Queen Anne-street, it was resolved to attempt the formation of an association in London to provide for the working classes, in densely-populated neighbourhoods in which they reside, places of resort where they may find unintoxicating refreshment, plain food, warm, well-lighted rooms, and the opportunity of spending hours of leisure removed from the temptations of the gin-palace. The endeavours have resulted in the formation of a limited company for the purpose under the presidency of the Right Hon. Cowper-Temple. About 1,500*l.* have been privately subscribed. Mr. J. C. Barnard, solicitor, of 15, Lancaster-place, Strand, gives his services as secretary. The capital required is about 10,000*l.*

NEW REREDOSES.

Rotherham.—There has just been placed in Rotherham parish church a new reredos, the gift of the Earl of Effingham. It is made of oak, carved and gilded, and in the centre are panels, overhung by a canopy. The panels are immediately behind the communion-table, and in each is a full-length portrait in oil. The chief one is that of Jesus Christ as the Good Shepherd, the other four are figures of St. John the Evangelist, St. John the Baptist, St. James the Apostle, and St. Stephen, the first martyr. The reredos was designed by Sir Gilbert Scott. The carving was the work of Mr. Rice, Lambeth; and the painting was executed by Messrs. Burlison & Gryl.

Brighton.—A new reredos, the gift of an anonymous donor, is about to be placed in St. Peter's Church, Brighton. It is thus described by Mr. E. L. Blackburne, the architect employed by the donor for the work. It will consist principally of Caen stone, enriched with alabaster and coloured marbles; the former to be used chiefly for backgrounds, the latter for the shafts of the columns, and for bosses or ornaments. The general plan may be described as a range of arcaded niches, five in number, to correspond with the lights of the chancel window above, crowned by projected canopies of O-G. form; the whole, excepting at the two ends where the buttresses pass down to the chancel floor, resting on a dado or surbase, the cornice moulding of which will form the floor of the recessions. Of these gables, the central one will extend to a considerable height above the general face of the arcading; the two others on each side being lower, to accord with the graduated outline given to the elevation. With reference to decoration and finish, the background of each niche will be covered with rich diaper-work of carved foliage, upon which, in the centre one, will be placed a panel of alabaster and coloured marbles, containing a jewelled cross of pure white alabaster. The two niches to the immediate right and left of the centre will have similar panels, with alabaster grounds, for the reception of emblematic representations of the four Evangelists. The two outer niches will be without ornamentation, but as respects the diapered background will correspond.

ACCIDENTS.

AN inquest has been held at Tunbridge Wells on the body of Mr. Benjamin Tompsett, a retired farmer, who was killed by the falling of a building in course of erection in Granville-road. From the evidence of Mr. James Weeks, architect, it appeared that through the work being thoroughly saturated by water, the key pier in the main wall was pushed in, and the others necessarily followed. If the wall had been built of the best possible bricks and the best possible mortar, it might have fallen in in the same way. Had the mortar been sufficiently set it would have stood for a fair average number of years. He did not attribute what had occurred to any fault in the building or the mortar used. The verdict of the jury was that the death was occasioned accidentally, and that it was consequent upon the extreme wet weather, followed by a frost, and though they thought it was injudicious on the part of the builder going on with the building while it was in such a wet state, they did not attach any blame to the workmen or foreman.

On the 12th ult. the inquest respecting the deaths of two men named Sadler and Beresford, who lost their lives through the fall of a lofty chimney-stack at the electro-plate works of Messrs. Deykin, in Birmingham, during a heavy gale which prevailed on the 30th January, was concluded. The stack in question was 70 ft. high, and the thickness varied from 18 in. at the top. It parted about the middle, and crashed through the roof of the manufactory, burying the workpeople, several of whom were severely injured, but the above were the only fatal cases. Telegraph wires were carried round the chimney, and the main object of the inquiry was to ascertain whether these had pulled the chimney down. Mr. Henry Pilacy, engineer, stated that he had examined the point of fracture. The mortar was black in colour, showing that smoke had been getting in between the bricks, and that there had been a fracture in the stack for some time past. He did not attach much importance to the weight of the five telegraphic wires upon the stack, but the affixing of them might have caused the fracture. For affixing the wires

he preferred a band, which would have surrounded the stack, to brackets, in fastening which large nails were used. The men who fixed the wires for the Post-office authorities stated that they used bands or brackets as they chose. There was no periodical inspection of the stacks to which the telegraph wires were attached. The coroner, in summing up, said "it would be for the Postmaster-General to say whether steps ought not to be taken to put a stop to the barbarous practice of fixing telegraph wires to tall stacks at manufactories." The jury found a verdict of accidental death, caused by the fall of a stack from the force of the wind acting upon the chimney and the telegraph wires.

An inquest has been held in Sheffield on the body of Patrick M'Glyn, a labourer, who was killed by the fall of a wall whilst working at some buildings in course of demolition in Sands Paviours, Bow-street. From the evidence it appeared that William Smith, foreman over the navvies engaged in excavating, had said to Mr. Battersby, the contractor, "That wall's not safe; my men are afraid to work there." Mr. Battersby replied, "It's quite safe"; and Smith rejoined that he did not want his men killed. The jury returned a verdict of Accidental death, at the same stating "that Battersby was highly blameable for the insecure state in which he had left the wall, and for allowing deceased to work under it at the same time."

The Tay Bridge, which is now far advanced towards completion, sustained very severe damage recently. A gale came on in the afternoon, and by five o'clock it was blowing with hurricane violence at Dundee, and had lashed the Tay into a perfect fury. Fifty-four workmen were on the bridge, and all efforts to take them off by a steamer proved abortive. The men, not being very sure of the stability of the part of the bridge where they were, located in a bothy that sheltered them from the storm, removed to another part, and it was well they did so, for about half-past eight two of the large girders, each measuring 245 ft. and weighing 250 tons, and which were not fixed, were "blown down, and the pier on which they mutually rested was snapped asunder like a thread, and the iron work upon it crumpled up like burnt paper." The pier next to it was also destroyed. The damage is estimated at 3,000*l*.

The New York papers give the verdict of the coroner's jury concerning the burning of the Brooklyn Theatre. The jury strongly censure the management for the lack of responsibility and discipline among the *employés*, the inadequateness of the appliances for extinguishing fires, the overcrowding of the stage with old scenery, and the closing of the means of exit from the dress-circle. The jury append a recommendation that in the erection of theatres there should be a brick wall extending from the roof, dividing the stage from the auditorium, with the additional provision of a fireproof screen, which could be used to shut off the stage from the auditorium in case of fire.

The tower of the parish church of Coychurch, near Bridgend, fell down on the 10th ult., destroying the south aisle and an harmonium, and disturbing several monuments. The body of the church was restored a few years ago, but the tower was, it is said, neglected for want of funds.

On the 14th ult. the well or tank of the new gasholder which is being constructed for the Corporation of Middlesbrough on the Marshes gave way. The excavations had been proceeding for several months, and concrete walls had just been got in round the foundations. The weight of the outside earth appears to have pressed heavily on these walls, which were not able to bear the pressure. The loss to the Corporation will be very considerable.

On the 12th ult. two buildings, situate in a yard in Sidney-street, Sheffield, fell down. There was no loss of life. It is conjectured that the recent heavy rains had undermined the foundations.

Restoration of Tewkesbury Abbey.—The "National Committee" for promoting the restoration of Tewkesbury Abbey are making an appeal for funds to enable them to complete the work of restoring this fine specimen of Mediæval architecture to something of its former grandeur. A meeting will be held in the library of Lambeth Palace (by permission of the Archbishop of Canterbury) on this Saturday, the 3rd of March, at three o'clock p.m., to promote this object.

STAINED GLASS.

Hadley.—A stained-glass window to the memory of the late Mr. John Millington, of Ketley, has just been placed in the chancel of Hadley Church. It consists of two lights and tracery, and the subject selected is the blessing of his sons by Jacob. The window has been executed by Messrs. Hardman & Co. in the Decorated style.

Hurley.—Two memorial windows have been lately fixed in the old Norman church of St. Mary, Hurley, Berks, one of them in memory of the late vicar, the Rev. T. J. Wethered, who died in 1867. The glass is painted by Messrs. Clayton & Bell.

Ewell.—A stained-glass window has just been placed in the chancel of Ewell parish church. The chief subject is the Descent from the Cross. This occupies three lights of the window; on either side of it are representations of Christ breaking bread with the two disciples at Emmaus, and John the Baptist pointing out Jesus as "The Lamb of God that taketh away the sin of the world." This window is by Capronnier, of Brussels, and it has cost 357*l*.

Belchamp Walter.—A painted window (by Messrs. Wailes, of Newcastle-on-Tyne) has just been placed in the church by the Rev. J. St. Clere, of Belchamp Hall, to the memory of Mr. George Washington Brownlow, artist.

Yatton.—A new painted window has just been placed in the chancel of St. Mary's Church, Yatton. It is the work of Messrs. Clayton & Bell. The subjects are four in number, with appropriate legends attached. First, the Resurrection; second, the final charge of St. Peter; third, our Lord's appearance to St. Thomas; fourth, the Saviour and the disciples in the storm on the Lake of Galilee. The cusped heads of the window are filled with canopies.

Wolverhampton.—The *St. Peter's Magazine* (Wolverhampton) says that the last window on the south side of the old church chancel has been reserved since 1869, at the request of Mr. Staveley Hill, to be filled with stained glass as a memorial to his parents. Mr. Hill died in August, 1872, and in October, 1875, Mr. Staveley Hill directed Messrs. Clayton & Bell to prepare a design from the text "Mercy and truth have met together; righteousness and peace have kissed each other." After some delay, the design was completed, and forwarded in July last. Subject to some alterations, the late rector approved of it; but Mr. Hill rejected it, as not being at all what he wanted, and subsequently requested Dr. Sebastian Evans to prepare another design on the same text. This was submitted to the late rector, and he, not being able to appreciate its beauties for an ecclesiastical building, asked the opinion of the church architect, Mr. Christian, on the two designs of Messrs. Clayton & Bell and Dr. Sebastian Evans respectively. It was given as follows:—"The design of the latter is very unsuitable for a church window, and too materialistic in treatment for the subject proposed. The drawing of the figures also is bad, the bodies and feet not belonging to each other, and they seem to me utterly wanting in anything like spiritual character. Messrs. Clayton & Bell's design is not good in several of its details, but the treatment of the subject is, I think, far more satisfactory than in the other case, and, with proper care and instructions, I doubt not but that they could produce from the sketch a suitable and beautiful window." This criticism was forwarded to Mr. Hill, who has since intimated that he does not intend to proceed with the execution of the window.

Acton.—The large west window in All Saints' Church has recently been filled with stained glass, from the designs of Messrs. Powell Bros., of Leeds. It contains six subjects illustrating the life of Moses, commencing with the institution of the Passover, and concluding with Moses addressing the multitude. The cost was 400*l*.

New Saw-mills: Coleraine and West Hartlepool.—New saw-mills have been erected at Coleraine by Messrs. Bellas, and commenced working on the 19th ult. The facilities for timber importation at West Hartlepool have naturally caused the erection of several large saw-mills in that town, and to their number another is now to be added. A site five acres in extent has been secured to the east of Belle Vue, and the erection of a large saw-mill, with all requisite machinery, is intended to be immediately commenced. The proprietor is Mr. C. Brown.

SCHOOL-BUILDING NEWS.

Hay.—A new British School has been opened at Hay, Breconshire. The structure is substantially built of native stone, with Bath stone dressings, and lined with brick. It is furnished with varnished deal desks and forms, manufactured by Mr. Lewes, of Ross. Accommodation is provided for 120 children. The architects were Messrs. Haddon, Brothers, Hereford; and the contractor Mr. James Webb, of Hay. The total cost is about 570*l*.

Tarporley.—On the 5th ult., a school to accommodate 100 children, and of the type known as British Schools, was opened at Tarporley. By the kindness of Mr. Ralph Harding, of Capetown, a suitable site was obtained on Rhuddal Heath. The committee, who were the principal supporters of the project, were in a measure their own architects, and when they had brought their plans to maturity, let the contract for the work to Mr. Amos Cookson, who commenced building in August of last year. The internal woodwork has been executed by Mr. Fleet, of Kelsall. The building is of red brick, and after the Gothic style of architecture. The whole of the work, including the interior fittings, has been executed for about 500*l*.

Middlesbrough.—The suite of buildings which has been erected at the sole expense of Messrs. J. W. Pease & Co., for the use of the Middlesbrough High School, has been formally opened and handed over by the donors to the representatives of the town. Only the centre block is at present completed, but it is intended to add a wing at each side so soon as the growth of the town demands and warrants it. The building is in the Gothic style, and is built of red pressed bricks, relieved with moulded stone strings. In the centre is a clock-tower, rising to the height of 100 ft., and surmounted with wrought-iron cresting and finials. The clock was supplied by Messrs. Gillett & Bland, of Croydon. The roofs of the building are covered with dark Westmoreland slates, with bands and diaper-work of green Westmoreland and red ridge-tiles and cresting. The front doors are of oak, moulded. Immediately within the front door is a spacious hall, on the right and left of which are rooms for the boys to hang their hats and coats in. At the end of this hall are lavatories for the boys. To the left is a corridor leading to the boys' class-rooms. On the first-floor of the left-hand wing are the boys' class-rooms and school-room, the latter being a lofty room, lighted by three large windows on each side. The roof over this room is supported by five principals of pitch pine, cut and moulded. The girls' department has the same number of class-rooms on the ground-floor and first-floor as the boys' department. There is also a range of lavatories and closet, constructed on Underbay's patent. The lavatories are by Finch, of London, and the gas-fittings by Messrs. Hart, Son, Peard, & Co. The rooms are warmed by Boyd's hygiastic stoves. The contract has been carried out by Mr. J. Johnson, builder, Middlesbrough. The cost of the buildings, so far as at present constructed, is over 10,000*l*.

CHURCH-BUILDING NEWS.

Salcot.—Attention has lately been drawn to the church in the outlying district of Salcot, Essex, and the tower being the only portion of the edifice found to be worth preserving, has for the last two or three months been in the hands of the church restorer. Owing to the nature of the soil, and neglect, the building had suffered very much from settlements at various periods, and was at last found to be in almost a dangerous condition; so much so, that the two buttresses on the north and south sides were obliged to be taken down and rebuilt in rubble and Bath stone. The large fissures or cracks east and west have been filled up, the walls having been previously secured by tie-irons. The dilapidated battlemented parapet has been restored, and coped with Bath stone moulded coping; the pantiled roof removed, and a massive oak flat roof, covered with stout sheet lead, substituted, in accordance with the original construction, with outlets through carved stone gargoyles. The expense has been chiefly borne by the rector, the Rev. F. Watson, and his sister; and the works have been carried out under the superintendence of the diocesan surveyor, Mr. Fred. Chancellor, of Chelmsford, and executed by Mr. Joseph Grimes, of Colchester.

Sudbury.—The restoration of St. Gregory's

Church, Sudbury, is rapidly progressing, the contractors being Messrs. Grimwood & Sons and E. Keogh for the stonework, and Mr. E. Green for the plastering, floor, &c. The monumental slabs are being carefully preserved, and are being relaid in the south aisle.

Middleton-in-Teesdale.—The Duke of Cleveland has promised the sum of 2,000*l.* for the new church, which there is a prospect of being speedily commenced. The Rector offers a site and 500*l.* on the completion of the chancel, and it is expected that other liberal contributions will be forthcoming.

Halifax.—Some time ago Sir Gilbert Scott was called upon to inspect, and report upon the restoration of, Halifax parish church. Sir Gilbert has just sent down a ground plan and interior view of the restored church, and has promised, as speedily as possible, to complete and transmit his report and estimates. A paragraph, which has gone "the round of the press," stating that his estimate has been received, and that he fixes 40,000*l.* as the cost of the restoration, has no foundation in fact.

Brighton.—The Chapel Royal, Brighton, was reopened on the 6th ult., after extensive alterations. The chapel was built in the Georgian period. All who remember what the building was like a little over a year ago,—with its uncomfortable and ancient high pews—will find the appearance of the interior entirely changed. The restoration has been carried out under the direction of Mr. A. Blomfield, architect, by Messrs. G. Lynn & Son, of Brighton. The building has been re-seated throughout, the gallery above the Communion-table removed, the front of the other galleries repaired and generally improved, the windows altered, and provision made for the organ and choir. The total cost has been 2,500*l.*, exclusive of church furniture. The "royal pew" no longer exists. The side windows and skylight have been filled with stained glass, and the gasfittings have been improved by Mr. R. Shrivell, of London. A reredos has been erected, and the chancel has been decorated by Messrs. Heaton, Butler, & Bayne, by whom some paintings, including one representing "The Good Shepherd," have been executed. The accommodation of the church has not been decreased, for though the west gallery has been removed, the space formerly occupied by the vestry under the southern gallery has been thrown into the building, and nearly 900 persons can be seated.

Barrow-upon-Trent.—The old parish church of Barrow-on-Trent was re-opened on the 7th ult., after re-seating and re-fitting. The square and unsightly pews have been replaced by modern open sittings of stained and varnished wood. The ponderous gallery, which blocked up the west end, has been removed, opening the western arch and window. Messrs. Lilley & Son, Ashby-de-la-Zouch, carried out the works.

Stepney.—Christ Church, Jamaica-street, Stepney, was consecrated on the 3rd inst. by the Bishop of London. The church has been erected from the designs of Mr. Ewan Christian, by Messrs. Downs & Co., of Southwark.

ROMAN CATHOLIC CHURCH-BUILDING NEWS.

Tudhoe.—The Roman Catholic Church at Tudhoe has been re-opened, after being redecorated. A new altar has been placed in the chancel. It is from the establishment of Messrs. Mayer & Co., Munich; the material is carved oak, and its cost is estimated at 500*l.*

London.—The restoration of St. Etheldreda's Chapel, Ely-place, having been steadily carried on through the last eight months, has thus far resulted in the excavation of the crypt underneath, and fitting it for divine service, and in the repair of the roof from end to end. The plaster ceiling having been removed, the oak timbers of the high-pitched roof stand out to the eye just as they did when first put up 500 years ago. In a few places, where the ends of the old beams were decayed, fresh oak timber has been spliced and dovetailed into them, so that the lofty pitch of the roof has been retained. The tie-beams and hammer-beams are new, and new boards of oak have been laid on the rafters throughout.

Harborne.—The opening of St. Mary's Retreat, the new church of the Passionist Fathers, at Harborne, took place on the 6th ult. The mission at Harborne was commenced in 1870, when the Fathers purchased the old Methodist Chapel; but, as their duties increased, it was found to afford insufficient accommodation, and the residence and grounds of Mr. Ralph Heaton were taken by them. Adjoining the house, which serves as a most commodious residence and monastery for the reverend gentlemen, a neat and substantial church has been erected. It will accommodate 400 persons, and is Early Decorated in style, adapted to the materials used. The exterior is of red bricks, and the roofs are covered with green mottled slates. The interior is of cream-coloured brick, pointed with red. Bands of buff terra cotta, made by Messrs. Gibbs & Canning, of Tamworth, are built in with the brickwork. The work throughout is simple in character, and the chief ornamental features are the west and north windows of the nave, which display some geometric tracery. These, and all the other windows, are filled in with tinted cathedral glass, by Mr. Benjamin Gay, of Bristol. The nave and chancel are 23 ft. wide, and the total length of the nave is 92 ft. The south aisle is 62 ft. by 12 ft., terminated by a chapel of the same width, and 19 ft. long, which is dedicated to the Sacred Heart. At the west end is a gallery for the organ and the choir. The sacristy is 20 ft. by 15 ft., and is placed at the south of the building. It is connected by a corridor with the monastery. Under it is a vaulted chamber, containing the heating apparatus supplied by Messrs. Redfern, of Hanley. The open timber roof, gallery, and dado round the walls of the church and sacristy, and all the woodwork, are executed in pitch pine. The benches in the church are of the same material. The west front faces the main road, and at the junction of the nave and aisle is an octagonal turret containing the staircase leading to the gallery, and above is an arcaded belfry in stone, terminated by a stone spire. The entire cost, including benches and fittings, is 4,000*l.* Messrs. Barnsley & Sons, of Birmingham, are the builders, and Messrs. Dunn & Hansom, of Newcastle-on-Tyne, are the architects. Mr. R. L. Boulton, of Cheltenham, has executed the carving.

Books Received.

A Manual of the Historical Development of Art. By G. G. ZERFFI, Ph.D., F.R.S.L. Hardwicke & Bogue.

THIS book is intended, we are told by the author (who has been for some years a lecturer in the Department of Science and Art at South Kensington), to "suggest and excite to the study of art-history" in schools and colleges. Dr. Zerffi seems to aim at connecting art with ethnology and history more directly than is usually attempted. There is no doubt that there is, as he says, a unity in the progress and development of a race, and that its art cannot properly be considered as a thing apart from and unconnected with the geographical situation and social character of the people. We are all beginning to see this now; all who think at all, at least. We do not know that Dr. Zerffi throws any new light on the subject in this book, and perhaps that was hardly intended; and we must regard it as putting in a compact form what is already recognised. This end would perhaps have been better attained if the author had aimed more at simplicity of style and confined his subject more within the limits which the size of the volume would seem to suggest. As it is, the book is full of very large ideas, which there is not room to develop or work out properly, and we think to a student taking it up to gain a first idea of art history it would prove rather puzzling than instructive. A small treatise on such a subject should keep a very definite line, but Dr. Zerffi branches off to so many illustrations from all things in heaven and earth that it is not always easy to see what he is driving at; and some of his analogies, such as that between the bubble and the Indian tope, are probably rather fanciful than real. We should like to see upon what specimens Dr. Zerffi founds his *six* varieties of the Doric style; considering the limited number of Doric buildings of which remains exist, we should call that rather over-refining. The book is far too full of long words, introduced for no adequate purpose except to impress the reader with an idea of the author's learning. How much the better are we for being told that "Everything is either stereometric or planimetric"? Very likely it is. We dare not dispute with an author who seems to have so much dictionary at his fingers' ends. But in all this there is pretentiousness. We have always a suspicion of books full of these big Anglo-Greek expressions, which serve only to deter young readers, or to make them think they are learning something very wonderful, when matter-of-fact statements are concealed under all this verbiage. Such writing argues that the author is thinking more of himself than of his readers. We can see no sense, either, in the affectation of putting aside the recognised English form of Greek words, and writing "Kyrus" and "Kentaurs" and "Dirkê," instead of "Cyrus" and "Centaurs" and "Diroé," &c. To do so is really obliterating a part of the distinctive character of the English language in its method of altering and assimilating Greek words, and disturbs all our associations. Besides it is not even consistently done; for if we were to have the Greek word, it ought to be "Kuros," not "Kyrus."

The preface is taken up a good deal with the subjects discussed in the Art section of the last Social Science Congress, under the head of four questions, which the author tells us he answered by anticipation in his lectures at the Art-Training School. He summarises his answers here, however, and in the main we do not differ from them, and are entirely with him in the opinion that if people, instead of running after old china, Mediæval candlesticks, or old pictures that can scarcely be seen (this last we must take *cum grano*) would spend more in providing greater opportunities and encouragement for our own artists, they would be doing more for art. And we quite concur also in his closing remark, that such a collection as the South Kensington is a better commentary upon lectures than any book-illustrations can be. People should see things with their own eyes if they want to understand them; but it must be remembered that every one does not live within reach of great museums. In his comments on the fourth of the "Social Science" questions, as to the influence on society of decorative art, Dr. Zerffi falls into the common error of exaggerating the horrors of modern taste. He says, among other things, that "we have coarse china frogs and lizards, crabs or lobsters, from which we eat our fruit or fish; or a life-like salmon with staring eyes is brought on our table, its back takes off, and we scoop out the real cooked salmon with which its inside is filled." What Dr. Zerffi may have seen we, of course, cannot tell, but we can only say that where we dine we do not now see such things, and as far as our experience goes they would be scouted as vulgar even by those who make no profession of artistic taste or principle. Plenty of weak, senseless, poor ornament there is to be seen, doubtless, but nothing so bad as this, unless it be in the houses of those who may claim the distinction of being in every sense "vulgar;" and when the author adds, "form of dish, association of ideas, and action of the host, are more worthy of anthropophagi than of civilised beings," we wonder more than ever from what section of "civilised" society he draws his experience.

VARIORUM.

"THE Amateur Mechanic's Practical Handbook," by Arthur H. G. Hobson (Longmans), is addressed to the amateur engineer, and treats of the lathe, drilling and planing machines, how to make a horizontal engine, and such like.——For the "City of London Directory," 1877 (Collingridge), special pains appear to have been taken with the compilation of each section, and efforts made to render the work as free from error as it is possible in a book containing such multifarious information. A glance at the contents will show that the work is arranged on a plan different from that of any other volume of the kind, and that nothing has been omitted likely to be useful. In addition to the usual directory information, which is of the amplest, the Official Directory furnishes details as to the public offices and officials of the City, both municipal and parochial. At the present time, when the ancient guilds of the City occupy so much public attention, the information contained in the Livery Companies section will be found peculiarly valuable. The Commercial Companies section will be seen to furnish the latest changes in the *personnel* of the respective directorates as well as the last dividends of all the important companies,—some of the latter declared so late as February, 1877.

Trees in London Thoroughfares.—The Newington Vestry has decided to plant trees along Kennington Park-road, and also along New Kent-road.

THE ROYAL INSTITUTE OF ARCHITECTS' GOLD MEDAL: 1877.

SIR,—It is rumoured that the President of the Institute will, on Monday next, be named as the recipient of this honour. You, Sir, will know how far this is correct; but if true, though one can have nothing whatever to urge against the respected president personally, yet I should like to protest against a step which I cannot think "well considered," and for the following reasons:—

The Council of the R.I.B.A., of which the president is naturally the head, suggests upon whom the honour of the Gold Medal should be bestowed, and although we can readily understand the president protesting against any claim on his behalf in such a case, yet if he is overruled, the fact remains that he is practically (or is at least a party to) conferring an honour upon himself.

I am aware there is a precedent for this course; unfortunately it seems likely to become stronger, until we can imagine it shortly becoming the rule. Most certainly no member of the body awarding the medal should be the recipient. No matter how worthy he may be, all will confess such a phase has an ugly appearance.

If rumour is in this instance correct, I trust the present nominee may have sufficient moral courage to decline an honour which, bestowed under such circumstances, may almost be considered a doubtful one.

A JUNIOR.

Miscellanea.

Newspaper Press Fund.—The annual general meeting of the members of the Newspaper Press Fund took place on the 24th ult., at the offices of the Association, Lord Houghton, the president of the Fund, in the chair. The annual report and balance-sheet for the year ending December 31st last stated that the new members elected during the year numbered fifty, while nineteen had been removed from the roll for non-payment of subscriptions, three had resigned, and there had been eight deaths. The roll now presented an aggregate of 357 members, 249 being resident in London and 108 in the provinces. The existing life members were fifty-nine. The grants during the year were forty-six, and the amount awarded 816*l*. The total grants since the formation of the fund had been 266, and the amount awarded 4,399*l*. 9*s*. 6*d*. The Marquis of Hartington, M.P., has consented to take the chair at the anniversary festival, on Saturday, May 5th next, at Willis's Rooms. The following additions were made to the rules:—"That every annual member who has paid his annual subscription of one guinea for fifteen consecutive years shall thenceforward be deemed a life member, and entitled to all the rights and privileges of life membership." "That any annual member may become a life member on tendering at any time the difference between two-thirds of the amount of his subscriptions already consecutively paid and ten guineas." "That every applicant for life membership may, on election, have the option of paying the subscription of 10*l*. 10*s*. by extending it over three years, in sums of 3*l*. 10*s*. per annum."

English Landscape Art.—At a meeting of the Society for the Encouragement of the Fine Arts, on the evening of Thursday, the 22nd inst., Mr. G. F. Teniswood, F.S.A., gave a lecture upon "English Landscape Art in the Past and Present Centuries." Mr. B. L. Mosely, LL.B., occupied the chair. The lecturer commenced by showing the debased condition of art at the first part of the last century, and how foreign ascendency affected the taste of the day. Detailing the early beginning of English art, he pointed to Hogarth, Wilson, Reynolds, and Gainsborough as the instruments of its revival. Placing Wilson as the founder of the English Landscape School, and noting his immediate followers, he traced its course to its culmination at the time of Turner. Comparing the characteristics of men of later date, he concluded by reference to the causes influencing its growth in modern times.

The Turners' Company and Technical Education.—This company, according to the *City Press*, have issued their programme for the competition for prizes in hand turning for general and for horological purposes. Medals and prizes with the freedom of the company for those who take first prizes will be awarded. For this purpose a sum of 50*l*. has been voted by the court to which the Baroness Burdett-Coutts has kindly added 25*l*. An exhibition of specimens will be held at the Mansion House in October, and the prizes will be presented by the Right Hon. the Lord Mayor.

Mycenæ.—Mr. William Simpson, who has been specially commissioned by the proprietors of the *Illustrated London News* to make sketches of the recent discoveries at Mycenæ, has arrived in Athens.

Holborn Improvement Scheme.—In reply to Mr. Kay Shuttleworth, in the House of Commons, who asked with reference to the Holborn Improvement scheme, dated November 19, 1875 (named in the return No. 294 of last Session), under the Artisans' and Labourers' Dwellings Improvement Act, 1875, what had been the fate of that scheme, Sir J. Hogg said the scheme was not approved by the Secretary of State. The Board has brought in a Bill, which has just been read a second time, for the purpose, among others, of widening Gray's-inn-lane, and the property thus required will include a great portion of the unhealthy dwellings which were comprised in the scheme, and in these circumstances the Board did not think it expedient to deposit a new scheme.

Hilton's "Our Lord Crowned with Thorns."—In the Consistory Court, Sir James M. Hogg and Mr. Payne, the churchwardens of St. Peter's, Eaton-square, applied for a faculty to sell a picture, painted by Mr. W. Hilton, and presented by the British Institution when the church was opened in 1826, of "Our Lord Crowned with Thorns." It was originally placed over the communion-table, and afterwards removed to the north transept, where it was hardly seen. The picture had been lent to the Royal Academy, and Sir Francis Grant had made an offer of 1,000*l*. for it. The Churchwardens were anxious to dispose of the same, and invest the purchase-money in Consols, and apply the dividends to the ornamentation of the church. The application was granted.

The Royal Academy.—In the House of Commons on the 20th ult., Mr. G. Noel, replying to Mr. Goldsmid, said that negotiations were in progress by the Council of the Royal Academy for the purchase, out of the interest of the funds bequeathed by the late Mr. Chantrey, of a picture which was to become the property of the nation if suitable room was provided for it by the Government. At the present moment there was ample room in the National Gallery to provide accommodation for sculpture or pictures, but if at any future time the collection should become much larger the Government would have to consider the propriety of finding additional accommodation.

Fall of a Gallery.—An accident occurred on the 25th ult. at the Marine and Locomotive engine works of Messrs. Hawthorne & Co., Newcastle-on-Tyne. In the erecting-shop of the locomotive department the usual large number of men were engaged at work when an extensive gallery, consisting of wood and supported by iron girders, fell without warning, and a number of workmen were buried in the ruins. Heavy pieces of machinery also fell with the gallery, and the removal of these was a work of much difficulty, so that the extrication of the unfortunate men proceeded but slowly.

The late Mr. W. H. Skyring, Surveyor.—This gentleman, whose name is known in connexion with "Skyring's Builders' Price Book," died at his residence, Stamford Hill, on the 17th ult., in his 81st year. The "Price Book" was projected by Mr. Skyring's father, who published the original edition 67 years ago. It still appears annually, under the auspices of one of Mr. Skyring's fellow-workers, Mr. F. Fisk. The late Mr. Skyring held several appointments in the City of London as surveyor, but had retired for some time from the active duties of the profession.

Technical Education.—A meeting of City companies interested in this subject has been held at the Drapers' Hall to make efforts for the promotion of technical education. The course suggested is to establish a central technical University, with affiliated schools of instruction in connexion with the various industries carried on in the suburbs of London and the manufacturing districts of the United Kingdom.

Another Good Theatre Gone Wrong.—At night, on January 27, a fire broke out in the Academy of Music at Indianapolis, Ind., destroying the entire building together with five stores. Fortunately no performance was in progress. The loss will probably amount to $150,000 or $200,000.

Pour Encourager les Autres.—A remarkable incident has come to the knowledge of the authorities at Lower Gornal, Scotland. For some time five generations have resided in one house, the oldest of whom is 85, next 55, third 30, fourth 17, and the fifth a few weeks old. They are all females; some of them are widows.

City and Spitalfields School of Art.—A course of lectures has been arranged for art students and others who may be desirous of receiving information concerning the various employments connected with art and design in which they might find occupation. They will be given on the evenings of the first four Thursdays in March by Mr. N. H. J. Westlake, F.S.A., Mr. Thomas Chatfeild Clarke, Mr. G. Aitchison, R.A., and Mr. Charles L. Eastlake.

Birmingham Branch of the Architectural Association.—On the 20th ult. a meeting of the members was held at their rooms, Bennett's Hill. The chair was occupied by the President (Mr. Yeoville Thomason), and a lecture on "Internal Decoration" was delivered by Mr. J. W. Tonks. The lecturer described and compared the decoration of the Birmingham Town-hall and that of St. George's Hall, Liverpool, contrasting the evident effort at unity of design in the former with what he considered the respectable tameness of the latter.

British Archæological Association.—At the ordinary meeting of the Association last week, Mr. George Godwin in the chair, after the exhibition of a number of very interesting objects, with descriptive particulars, Mr. J. R. Planché, Somerset Herald, read a critical paper on the picture in the National Gallery called, "The Battle of St. Egidio," and attributed to P. Uccello. We will give the pith of his observations in our next.

TENDERS

For the erection of the Foresters' Arms and shop adjoining, at Goose-green, Dulwich, for Messrs. Morgan, Bros. Mr. Gordon Stanham, architect:—

Bettwell	£4,036 0 0
Hearle & Son	3,975 0 0
Adamson	3,175 0 0
Hockley	3,150 0 0
Downs	2,939 0 0
Shapley	2,833 0 0

For pipe sewers, in the parish of Battersea, for the Board of Works for the Wandsworth District:—

	Sheepcot Lane.	Hope Street.	Blondel Street.
Pearson & Kampling	355 0 0	236 0 0	396 0 0
Serff	353 0 0	227 0 0	456 0 0
Taylor & Brown	304 0 0	189 0 0	377 0 0
Jackson	300 0 0	250 0 0	516 0 0
Foard	294 0 0	182 0 0	294 10 0
Thompson & Son	233 0 0	164 0 0	304 0 0
Torkington	222 0 0	153 0 0	297 0 0
Denyer	217 15 0	297 5 0	377 15 0
King (accepted, all)	211 10 0	163 10 10	412 5 0
Pizzey	202 0 0	193 0 0	435 0 0
Corry	192 6 3	221 10 0	314 17 0
Turtle & Appleton	—	444 0 0	—

For the reconstruction and extension of pier at Eastbourne, for the Directors of the Eastbourne Pier Company. Mr. E. Birch, engineer. Quantities supplied by Messrs. R. L. Curtis & Sons:—

Haywood	£8,777 0 0
Williams & Co.	8,550 0 0
Laidlaw, Sons, & Caine	8,396 0 0
Phillips	8,100 0 0
Head, Wrightson, & Co.*	6,985 0 0

* Accepted.

For building a factory in St. Peter's-square, Hackney-road, for J. H. Sawards, esq. Mr. W. Mundy, architect:—

Croker	£893 0 0
F. & J. Wood	843 0 0
Thomason	845 0 0
Nightingale	760 0 0
Batchelder	753 0 0
Hearle	723 0 0

For additions to Mr. J. T. Morton's manufactory, Millwall. Mr. William Eve, architect:—

Crabb	£1,430 0 0
Nieser	1,334 0 0
Sheffield	1,292 0 0
Woodward	1,210 0 0
Salt	1,175 0 0
Williams & Rowe*	917 0 0

* Withdrawn in consequence of error.

For alterations to No. 51, Broad-street, Bristol. Messrs. Ponton & Gough, architects. Quantities supplied:—

Pugsly	£800 0 0
Church & Phillips	792 8 0
Dowling	788 10 0
Clarke	786 0 0
Wilkins	764 0 0
Stevens & Bastow	750 0 0
Chorley	747 10 0
Eastabrooke & Son	734 0 0
Lewis & Edbrooke	723 19 0
Munro	714 5 0
Humphries	679 3 0
Davies	675 0 0
Stevens & Gardiner	667 15 0
Wilkins & Son	643 0 0

For alterations, for Mr. Robert Beardall, at No. 110, Oxford-street. Mr. George Edwards, architect:—

Sanders	£814 0 0
Simpson & Co.	720 0 0
Aitchison & Walker	719 0 0
Scharien (accepted)	592 0 0

For works to the King's Arms Inn, Shepherd's Market, Mayfair, for Messrs. Watney & Co.:—

Lamble	£243 0 0
Hockley	233 0 0
Grimwood & Sons	220 0 0

For additions to Springfield Lodge, for Mr. B. J. Hudson. Messrs. Lamb & Church, architects. Quantities supplied:—

Hockley	£1,075 0 0
Shearman	963 0 0
Godden	677 0 0
Long	670 0 0
Avins & Co.	660 0 0

For the erection of new boys' and girls' schools in connexion with the Martyrs' Memorial Church, St. John-street-road, Clerkenwell. Mr. Jesse Christian Hukins, architect:—

Staines & Son	£1,902 0 0
Bayes, Bros., & Allen	1,800 0 0
Ebbage	1,799 0 0
Cowland, Bros.	1,692 0 0

For additions to schools, Lower Park-road, Peckham, for the London School Board. Mr. E. R. Robson, architect. Mr. W. H. Barber, surveyor:—

Roberts	£4,840 0 0
Newman & Mann	4,759 0 0
Hobson	4,724 0 0
Nightingale	4,711 0 0
Jerrard	4,659 0 0
Thompson	4,656 0 0
Downs	4,644 0 0
Tyermann	4,600 0 0
Tongue	4,583 0 0
Hill, Higgs, & Hill	4,454 0 0

For new Wesleyan Methodist Chapel, Winterton, Lincolnshire. Mr. Hanger, architect:—

Parker	£2,150 0 0
Sutton	2,100 0 0
Lumley	2,100 0 0
Richardson, Bros.	2,090 0 0
Bray (accepted)	2,020 0 0

For building bath-room, and alterations at Green-street, Bethnal-green, for Mr. Brad rook. Mr. Mundy, architect:—

Anley	£456 0 0
Nightingale	430 0 0
Batchelder	423 0 0
Thomason	399 0 0
Beale	397 10 0
Hearle	389 0 0

For the erection of new schoolrooms to the Victoria Wesleyan Chapel, St. John's Wood. Mr. Chas. Bell, architect:—

Bresly	£1,809 10 0
Tarrant & Sons	1,737 0 0
Tavener & Son	1,705 0 0
Scrivener & White	1,704 0 0
Denham & Sons	1,697 0 0
Burford	1,633 0 0
Hackworth	1,604 0 0

For corn stores and oasthouses at Rainham, for Messrs. Wakeley. Mr. John Drake, architect. No quantities supplied:—

Jeffreys (too late)	£2,100 0 0
Gates	1,879 0 0
Calland	1,855 0 0
Naylor	1,833 0 0

For additions to the Roshear Board Schools, Camborne, for 400 children. Mr. James Hicks, architect:—

Peters & Treloaven	£1,170 0 0
Clifton & Pengelly	1,140 0 0
Trounson & Peters	1,100 0 0
Nettle & Dellbridge	1,070 0 0
Mills & Bellman	1,067 0 0
Julian & Sons (accepted)	900 0 0

For new Board School at Kobelland, Camborne, for 120 children. Mr. James Hicks, architect:—

Clifton & Pengelly	£491 14 0
Trounson & Peters	469 1 6
Peters & Treloaven	456 15 0
Mills Bellman	434 4 7
Nettle & Dellbridge	407 6 0
Julian & Sons (accepted)	400 0 0

For works to premises for Messrs. Jones, Brothers, Holloway. Mr. A. E. Hughes, architect:—

Williams & Sons	£1,588 0 0
Grimwood & Sons	1,508 0 0
Grover	1,494 0 0
Watson, Bros.	1,444 0 0

For the erection of mission-hall, Creek-street, Deptford, for the Rev. J. T. Wigner and the Building Committee. Mr. Edward Clarke, architect. Quantities supplied:—

Gammon & Sons	£2,213 0 0
Cain	2,143 4 0
Macey	2,066 0 0
Allpress	2,000 0 0
Hill, Higgs, & Hill	1,961 0 0
Cocks & Co.	1,897 0 0
Green	1,877 0 0
Rider & Son	1,626 0 0

For three cottages at Mere, Wilts, for Mr. Meyrick Bankes. Mr. William Wing, architect:—

Hooper	£660 0 0
Farthing (accepted)	605 0 0

For alterations and additions to Radcliffe's School, Steeple Aston, Oxon, for the Governors of the Charity. Mr. William Wing, architect:—

Hopcraft & Bennett	£490 13 3
Hopcraft & Austin	414 0 0
T. Hopcraft	412 0 0
Eglinton & Grant (accepted)	400 0 0

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